# STUDIES IN APPLIED TACTICS

The second of the

KARL VON DONAT

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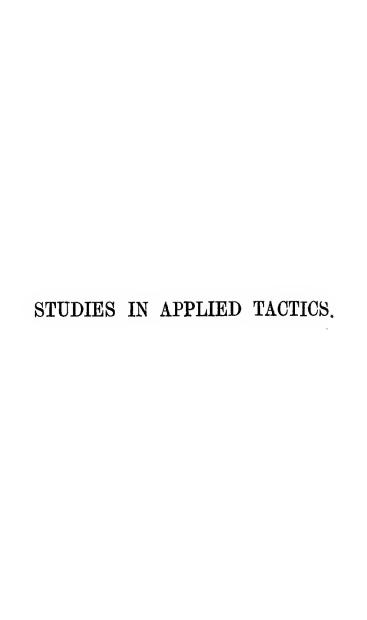
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# STUDIES IN APPLIED TACTICS.

GUIDE FOR OFFICERS PREPARING FOR TACTICAL EXAMINATIONS.

BY

#### KARL VON DONAT.

LATE LIEUTENANT EAST PRUSSIAN FUSILIEE BEGIMENT NO. 33

(NOW "REGIMENT COUNT BOON"),
AND FOR THE LAST THIRTEEN YEARS PREPARING OFFICERS, ETC., FOE MILITARY
EXAMINATIONS IN ENGLAND.

"Tactics crystallize in the orders to the troops."-K. v. DONAT-

PART I. SECOND EDITION.

WITH MAP.



LONDON:

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1894.

#### LONDON

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#### PREFACE.

In this little book the attempt is made—for the first time in England, so far as I am aware—to assist in the study of Applied Tactics with small units. Not many have the opportunity of taking part in a "Kriegspiel," but all can read at home.

If it finds favour, I shall continue with the solution of a series of questions as set in the various tactical examinations, and introduce such as I think ought also to be set.

To every one who has experience in Tactics it will be apparent that, when solving a question as mostly set in the current examinations, the time allowed to do so properly is altogether inadequate. Latterly three is the usual number to be done in three hours.

Two to three hours ought to be allowed for one question, otherwise only a perfunctory answer can be obtained, and thus a superficial student is placed on equality with a serious one.

An examiner should be able by one, or at the utmost two, tactical questions to sift the chaff from the grain, and allot to a nicety the marks, however severe the competition.

It should further be made obligatory to note the time when a candidate has handed in his answer—a point of great importance, particularly in a competitive examination.

It is also very much to be regretted that, in some examinations, Tactics are placed on an equality with Fortification and Topography, which are only auxiliaries to them. Double the number of marks should be allotted to Tactics, for, by making intelligent use of the map when disposing troops, the candidate shows that he knows half the Topography, and this should count in his favour. Fortification also frequently forms part of a tactical problem.

A book is easily learnt by heart, but education and training are only arrived at by application; therefore questions in Tactics permitting in their answer only quotations from a book, should be limited and a candidate's intelligence be not merely judged by these, but a chance should be given him to show that he can practically apply the information which he has put on paper.

To the more advanced student I recommend a book called "Staff Duties in the Field," etc., by Captain J. M. Grierson, R.A. (to be had of all booksellers). It is an admirable little volume, too little known, I think, and should be studied by all captains and officers of a higher grade.

The accompanying map is reproduced by kind permission of the Controller of H.M. Stationery Office.

It represents the eastern portion of the battle-field of Sedan.

Fleet River is La Givonne River, Newtown is Bazeilles, Shaw Wood is Bois de la Garenne, etc. July, 1892.

#### PREFACE TO THE SECOND EDITION.

THE references have been brought in consonance with the new "Infantry Drill" and "Field Artillery Drill," which were issued since the first edition was published, and a few minor alterations have been made in the text as suggested to the author.

#### KARL VON DONAT.

4, CANNING PLACE, LONDON, W., March, 1894.

#### STUDIES IN

## APPLIED TACTICS.

#### INTRODUCTION.

THE following is one of the remarks of the examiner in Tactics, published in the recent "Report on the Result of the Examination held in November, 1891, of Officers of Regular Forces, Militia, and Volunteers":—

He says, "There is frequently an absence of exactness in the orders to the different units, which would render it difficult for commanding officers to execute them."

This refers to officers of the regular forces, in particular to captains under examination to qualify for field officer; so also the following remark: "Some officers are very vague, not so much as to what they would do, but as to how they would do it, which seems to show that they have studied their

text-books, but have not themselves thought out the matter"

This same examiner characterizes the answers of field officers and captains of militia and volunteers in the following words:—

"I regret that I cannot give a favourable report on this examination. Very few of the papers are even moderately good, and none of the officers examined have any real knowledge of the subject. This is not wonderful, when their limited opportunities of acquiring such knowledge are taken into account; but, on the other hand, it raises the question whether officers of the militia and volunteers should be examined in the application of troops to ground, and whether the standard required of them should not be limited to the theories of the text-books; the latter they can, and do, study for themselves, while applied tactics require either special instructions or exceptional talent combined with exceptional opportunities.

"In a large number of cases they have not (to use the words of one of them) 'grasped the subject,' and they have, as a rule, but faint ideas of what ought to be done, and not at all as to how to do it." So far the examiner.

To my mind it rather "raises the question" how militia and volunteer officers can be provided with that "special instruction" in "applied tactics" so as to obtain satisfactory results in an examination—the only test to prove that the officer has "grasped the subject," when it is impossible to test by handling troops in manœuvres or before the enemy.

A plainer mode of stigmatizing militia and volunteer officers as amateur soldiers, and of advocating that they should be kept on that level, cannot well be imagined. May they raise a protest! Others can enlarge upon this particular point.

In the following pages the attempt is made to impart that *special instruction* to those interested, by showing a way to solve a tactical problem set in November, 1891.

Remembering the remark of the examiner first quoted in these lines, I advise every student of Tactics, above all, to adopt my motto—

## TACTICS CRYSTALLIZE IN THE ORDERS TO THE TROOPS.

The solution of the problem will be divided into-

I. The Process of Development, which means survey or reconnaissance of the given ground, the map, its scale, directions of compass, features of the ground, vertical interval, steepness, practicability for the different arms, relative heights, watercourses, bridges, defiles, villages, woods, etc., review of the forces at disposal, the reports received about the enemy, the instructions under which the force is required to act, the tactical principle involved, how it is to be

applied in this special case, coming to a determination, how this must be expressed, or, in other words, what an ORDER must contain.

II. The Production of the Order, i.e. what must be despatched to the troops under your command to carry out your determination. This will be, as a rule, the actual answer to the question. Like a crystal, it must be simple, lucid, unmistakable, and, like such, produced rapidly after the slow process of evaporation; in other words, this part should take the shortest time to answer in an examination.

III. Testing the Value of the Order (the purity of the crystal).—This means nothing else but giving the reasons for the order or orders, which are usually demanded in an examination; and here the candidate has ample opportunity to lay down in writing what has occupied him mentally in Part I. He can bring forward everything which is to his advantage, and may anticipate and refute any adverse criticism of the view he has taken of the tactical situation.

With this to guide the reader, I begin the

#### PROBLEM I.

(Vide map, Official Report mentioned-November, 1891.)

"It may be assumed that the Fleet River is impassable below Morton, except at the bridges.

"You are in command of-

One brigade of infantry and two batteries marching on one road;

Two regiments of cavalry in advance; and are in pursuit of a defeated enemy.

"At 9 am. on the 7th of September, 1891, as the head of the advanced guard (moving east on the road I) debouches from Longside, your cavalry is standing as follows: First regiment at bridge 2; second regiment at bridge 7; each covered by scouts. At the above hour they report that the enemy (two battalions and three batteries) is in position on Garnant Down, and that the villages Morton and Parton are held by small parties of infantry. At the same moment your advanced guard is fired on from the south-east corner of Shaw Wood.

"State what dispositions you would make in order to force the enemy from his position, and calculate roughly by what hour those dispositions would be completed. Give your reasons for the plan proposed."

#### SOLUTION.

(A pair of compasses, a pencil, and a piece of paper should always be at hand.)

### I. Process of Development.

The scale is 3 inches to one mile, or  $\frac{1}{21120}$ , a slightly smaller scale than the original surveys of

most countries. The usual scale by which troops would be disposed in actual warfare in England would be  $\frac{1}{63360}$ , or one inch to the mile, in other countries  $\frac{1}{100000}$  or  $\frac{1}{80000}$ . The larger the scale of the map, the more detail is probably required in the dispositions and the showing of the troops on the map; this is one point to be kept in view.

The conventional signs for the marking of the troops are given in Colonel Richards' "Text-book on Topography," and I advise the student to colour little bits of paper, and pin these on the map where a body of troops is placed, or, still better, to use small cubes of coloured lead or coloured paper (off stamps) gummed to it; the troops can then be moved about, and one map can be used for all sorts of problems.

The map, measuring about  $13 \times 8$  inches, represents about  $\frac{13 \times 8}{9}$ , or roughly 12 square miles of country, on which to operate.

The compass points are not marked, but the rule is that, where such are omitted, the side margins are to be taken as true north (above) and south (below). Besides, the wording of the question will sometimes give information in this respect, and here in this question it leaves no doubt.

The Fleet River being impassable (except by the bridges) only below Morton, the other watercourses can safely be disregarded as obstacles, since nothing

on the map indicates marshy ground, steep banks, etc. All having their sources within the map, and none exceeding two miles in length, one may consider them as ditches which can be crossed by all arms without the slightest delay.

The 7th of September is mentioned in the question, but not the state of the weather, which is of great importance in all tactical operations. We may assume, therefore, any probable weather we like, and which would fit conveniently with our dispositions whenever we discuss Part III. mentioned in the introduction. However, it is safest to assume always ordinary and likely circumstances. It is nearing autumn, and so let it be a temperate air, clear, and a light breeze. This is also in conformity with the question; for how could the cavalry otherwise have reported so precisely on the enemy? We assume, therefore, that the surface of the ground is ordinary, and exercises no retarding influence on any movements.

All the roads except part of one are fenced in. What the nature of these fences is can also be conveniently assumed; they need not cause the slightest delay when deviating from the road; but still, as one road is marked "unfenced," it may be taken to mean that an obstacle, however slight, exists at the side of the roads, which may also afford cover from view to troops moving on them.

Alternate contours are marked thick on the

map; here it signifies nothing particular, and need not be noticed; it makes it only more difficult for the candidate to judge the steepness of the ground, as the shading obscures the lighter contours at the steep places. The hillsides bounding Fleet valley on the west are the steepest, particularly between Morton and Parton, also part of the ground between Challow and Pewsey Wood, and the western slopes of the Forest of Arden. The vertical interval being 25 feet and the scale 3 inches to the mile, the ground is altogether gentler sloped than appears to one accustomed to read maps with normal contours, i.e. 40 feet with this scale. The steepest slope on the map is found by measuring the shortest horizontal distance between two adjacent contours, here about 25 or 30 yards, say 25 yards; therefore the gradient at that place is  $\frac{25 \text{ feet}}{25 \text{ yards}}$  or  $\frac{1}{3}$ , which is 20 degrees of slope; otherwise the ground is, on the average, perhaps 5 degrees, or gentler. Except at a few places, notably those on the right bank of Fleet Valley, all arms could manœuvre.

The east bank of Fleet River has a command over the west bank, but troops debouching from Longside could not be seen from Garnant Down, the visual line, intercepted by the ridge on the west bank, being steeper from this ridge to Longside than to Garnant Down.

Access to the western half of Shaw Wood, unobserved from Garnant Down, can be gained by means of the small valley north of Longside, and probably even unobserved from the south-east corner of the same wood, although, debouching from Longside, the head of the advanced guard received fire from there; the houses of Longside may screen a movement until in that small valley.

It is to be remembered that the bridges can only be passed over in a front equal to the breadth of the bridge, which appears here everywhere of the same width as the roads. Morton and Parton bridges are probably screened by houses from view and fire of artillery at Garnant Down; those below Parton, if visible from that hill, which is doubtful, on account of the trees of Shape Copse, are 4000 yards from it, therefore beyond effective artillery range.

Anyhow, these bridges are so many defiles to be passed over in presence of the enemy, who also may have prepared to blow them up whenever forced to evacuate Morton and Parton. This latter consideration would influence the commander in making his dispositions to force the enemy from his position.

No detail is given as regards the nature of outskirts of villages or houses; it shows that this is immaterial here, and indicates only that the enemy fights, under cover, and can with small numbers resist superior forces. That a part of Morton and Parton lies on the western bank is a source of weakness for him, since a sudden seizure of those parts by the attacking force before he determines to give them up might deprive him of the opportunity of demolishing the bridges.

The nature of the woods is very important in tactical operations, and conventional signs, indicating at least undergrowth or otherwise, ought always to be given. When judging the visibility of ground, the height of the trees, being unknown, makes it impossible to gauge accurately what can be seen and what not. It is best, whenever no certainty exists, to assume the ordinary, and that is, that infantry can pass through a wood everywhere, cavalry in single file along the footpaths, and artillery only on rides and roads.

Shaw Wood favours a covered approach towards Morton to within decisive ranges. From Morton to Garnant Down is the shorter distance as compared with an approach thither from Parton; and along the foot of Garnant Hill the troops are in the dead angle, and could gain access to Shape Copse, if unoccupied, with little loss. Once in Shape Copse, the enemy would hardly await the attack on Garnant Down, but withdraw. This Shape Copse also favours a covered approach from Parton. The enemy, evacuating Parton, would probably retire into Shape Copse, and finally on Garnant Down; the assailant, following with skirmishers along the watershed south of Shape Copse, and detaining

the enemy there, can bring up meanwhile his main force in comparative security along the Parton-Challow valley. The effect would soon become apparent.

The footpaths through the Forest of Arden and the Pewsey Wood should favour any movement of the cavalry.

This concludes the survey of the map. On the actual ground the officer commanding would have to go approximately through the same process. Before he acts he must first reconnoitre; if he has a map, he does so as we have done here, but is aided by actual observation, at least for the immediate neighbourhood, and from favourable points for the more distant ground.

The force at disposal is four battalions and two batteries marching on one road, and two cavalry regiments, these latter in positions as indicated in the question at bridges 2 and 7 respectively, with scouts in front, presumably keeping the enemy under observation.

"As the head of the advanced guard debouches from Longside" at 9 a.m., the cavalry reports precisely on the enemy, and at the same moment the head of the advanced guard is fired on from the south-east corner of Shaw Wood.

The immediate action of the commander of the whole, if on the spot, would be—to order the head to halt, to get under the nearest cover outside

Longside, here the watershed north-east of Longside, from which they can see the enemy's position in Shaw Wood, the advanced party to move up to and halt under cover at the eastern exit of Longside, and the flankers, as patrols, to approach as close as possible to both flanks of the enemy's position from which the fire was received, to ascertain its extent; the left flanker would, behind the watershed above mentioned, move northwards and gain access to Shaw Wood, the right flanker behind the watershed south of Longside road to the head of the small valley. If the commanding officer of the whole (we will call him once for all "general") is not there, as is most likely, the officer commanding the advanced party would act thus, and report at once to the rear what happened, and his action.

But before we enter upon the acting phase (Part II. of the solution), we must first ascertain the precise position of the infantry and artillery when the head is stopped.

Here I refer the reader to the regulations which form the base, viz. "Infantry Drill, 1893;" "Cavalry Drill, 1891, vol. ii.;" "Field Artillery Drill, 1893;" designated as "I. D.," "C. D.," and "A. D.," respectively.

On p. 143, sec. 142 ("I. D.") we read, "The advanced guard is subdivided into two parts—the vanguard and the main guard. The vanguard is

always composed of cavalry when available, with a body of infantry as a support. The main guard comprises the remaining troops of the advanced guard. It is only when the advanced guard is very large that guns are attached to the vanguard."

In this instance the cavalry must have been sent in advance independently of the remainder of the force, otherwise the tactical situation is not a likely one, there being no more cavalry in the immediate front; the infantry must therefore be assumed as taking its own measures for security, for the cavalry might at any moment be dispersed, and the screen no longer be in front, or it might be suddenly driven in by superior hostile cavalry, the enemy during his retreat having received reinforcements. These measures of security are, therefore—an advanced guard sending forward the vanguard, this securing itself by the advanced party, and this again sending forward a file or two under a noncommissioned officer as head or point, all infantry.

Of what strength will this advanced guard be? Refer to p. 146, sec. 145 ("I. D."). There it is said—

"The strength of an advanced guard will be proportionate to the strength of the force it is covering. This will be further influenced by the nearness or distance of the enemy. The larger the force, the larger in proportion may be the advanced

guard. This proportion may vary from a fourth to an eighth, but its strength is mainly regulated by the work it is meant to perform.

"When the force is large, its movements will usually be covered by a detached body of cavalry, whose special duty is to search for the enemy and report his position and movements.

"When the force is small, or cavalry for scouting is not available, this work will be done by the advanced guard. But in all cases the advanced guard is responsible for the security from surprise of the troops it is covering."

The latter sentence makes it here necessary for the infantry to subdivide as above stated.

The pursuing force is comparatively small, the distances at which the various bodies will have to follow each other are not great, as will be seen; and the time it takes the general to come to any decision, and make his dispositions at any place and at any moment, is readily filled up by the closing up of the various bodies on the front; thus no time is lost in having the whole force concentrated, and striking with it a blow in any required direction. For this reason also no artillery need be distributed to the advanced guard.

Half a battalion may be considered a proper one.

This strength can, of course, be argued against;

probably nobody will advocate less, but many more. To my mind, the point is indifferent; no principle is involved, only opinion. Besides, the cavalry is for all practical purposes here part of the advanced guard, and then the proportion of the latter to the force it covers is at once more than one-fourth.

To satisfy any one disagreeing with the non-distribution of artillery, I quote p. 147, sec. 146 ("I. D.")—

"The organization of an advanced guard provides for the double duty of reconnoitring and fighting; it should therefore, when possible, be composed of all three arms.

"The proportion of each arm in an advanced guard depends on the nature of the work to be done, and the character of the country to be traversed. The number of cavalry should be at least adequate for reconnoitring. In an open country the number of cavalry and guns is proportionately much greater than in a close or mountainous country. The bulk of an advanced guard is usually composed of infantry."

Also p. 152, sec. 3 ("A. D.")-

"A battle usually commences with the fire of artillery; therefore artillery should march at the head of columns. But artillery, being defenceless on the march, would, if it led the column, be at the mercy of small bodies of cavalry, or even of the

armed inhabitants of the country; it should therefore have some escort.

"Moreover, artillery, when pushed forward into action far in advance of the main body of the troops to which it is attached, requires protection to its flank against the advanced cavalry and infantry of the enemy.

"Artillery, therefore, when on the march, should immediately follow whatever troops are considered sufficient for its protection. The artillery of an advanced guard might march in rear of the leading battalion."

Of course, this means more than one battery, for a smaller unit than one battalion would suffice for the protection of one battery or less.

This is apparent from the lines immediately preceding the above quotation, viz.—

"On the above principle, the divisional artillery (three or four batteries) would probably follow the leading battalion of the main body of the division to which it belongs."

Horse artillery naturally gets its protection from cavalry only, if attached to such preceding an army.

All this refers more to large bodies of troops. The force here at disposal, if considered as quite independent, is too small to form an advanced guard composed of all arms; its fighting power lies in its concentration, and in not splitting up its units.

The battery, if not with the advanced guard, has only to traverse the distance from the main body to the main guard, say one mile, which it can do in ten minutes, if signalled to advance; it would take the battery commander, who may be with the advanced guard, all this time and perhaps more to reconnoitre and choose a position for his battery. But if the force is not an independent one, then it is, probably the advanced guard, which has its artillery and has secured itself against surprise by detaching forward the half-battalion mentioned as a vanguard. This vanguard is too small to have guns, as explained on p. 13.

The advanced guard of this force being half a battalion, it remains now to be determined what distance intervenes between its head or point and the tail of the column it is covering.

The length of the main body is three and a half battalions in column of route; i.e.

 $3\frac{1}{2} \times 400 = 1400 \text{ yards};$ 

two batteries, also in column of route,

 $2 \times 224 = 448$  yards.

Total length of column to be covered, disregarding ammunition and baggage waggons, is roughly one mile.

Referring to the "Infantry Drill," p. 148, sec. 147 (3), we find the following rule laid down for the distance the advanced guard should be sent ahead:—

"No fixed distance can be laid down between the advanced guard and the body of troops it is covering. The primary duty of the advanced guard is to protect the troops moving in rear from surprise. The main guard should therefore be sufficiently far in advance to enable the troops it is covering to form up in sufficient force to receive the enemy should he drive in the advanced guard. This distance will depend on the length of the column. It must always be sufficient to give the column time to form for battle."

From this we arrive at the conclusion that the advanced guard will precede about one mile, for the last man in the column must march one mile to be on a level with the first man, and form up on him in battle order.

The advanced guard naturally secures itself by forming a vanguard, and this will probably consist of one company; we will assume it here to be of such strength.

The main guard of three companies covers a length of road equal to  $\frac{3}{8}$  of 400 yards, or 150 yards.

The distance which should intervene between it and the vanguard is laid down in the "Infantry Drill," on p. 148, sec. 147 (1), as follows:—

"The main guard of the advanced guard follows the vanguard at a distance depending on the strength of the whole. When the advanced guard is small, its main guard will be proportionately nearer the vanguard. The duty of the main guard is, by timely support, to enable the vanguard to continue its work of exploration. The distance therefore between these two bodies should be such as would meet this requirement."

The vanguard in this instance has only to fulfil one of these requirements, the exploration being carried out by the preceding independent cavalry; it should therefore be within supporting distance of the following body, but should also be enough in advance to prevent the body it precedes from coming at once within effective musketry range of the enemy, if the covering bodies of the vanguard are suddenly driven in.

About a quarter of a mile would be ample.

The latter reason also chiefly determines the distance which intervenes between the vanguard and its advanced party, which may consist here of one or two sections of the company of the vanguard, and, between the advanced party and the point or head, usually one or two files under a non-commissioned officer.

The possibility of keeping connection with these small parties also determines the distance, as they cannot detach connecting files.

To recapitulate, the length from head to tail is-

```
Main body ( battalion, 2 batteries, 3 battalions) 1 mile.
Distance ...
                                                     1 mile.
Main guard (3 companies), about
                                                             150 yds.
                                       •••
                                                •••
                                                        ,,
Distance ...
                                                             400
                                                •••
Vanguard (1 company)
                                                              25
                                                                   ,,
                                                       ,,
Distance ...
                                                             300
Advanced party (1 company)...
                                                              25
                                                       ,,
                                                                   ,,
Distance ...
                                                             150
                                       ...
                                                        **
Head or point (few men)
                                       ...
                                                 ...
                                                        ••
```

Total ... 2 miles 1050 yds.

Say roughly,  $2\frac{1}{2}$  to 3 miles.

Marching at the rate of two and a half or three miles per hour, it would therefore take about one hour for the rear to form upon a level with the head. Orders or signals also take some time to be brought from front to rear, but this may be counterbalanced by a quicker pace of the infautry in an emergency for such a short distance.

This estimate of time and space would usually have to be made, even if the question is not asked directly as in this case, viz.—

"Calculate roughly by what hour those dispositions would be completed."

The question is not precise in stating who receives the report at 9 a.m. "that the enemy (two battalions and three batteries) is in position on Garnant Down, and that the villages Morton and Parton are held by small parties of infantry," but it may be taken for granted that you, the general in command of the whole, have received this report.

At once the question arises: where are you as a commander? If your force is not followed by larger bodies, and not an advanced guard, you are probably at the head of your main body, and a distance of one and a half to two miles separates you from the head of your force, and about three miles from the nearest enemy. In about fifteen minutes you can gallop to the head and bring forward your artillery, which would therefore be in ample time, if it were not, as here assumed, with the advanced guard; in fact, it would then probably be sooner on the spot than wanted.

The infantry, continuing its march, would be assembled in about one hour or under, at the east entrance of Longside.

If your force is an advanced guard, you, as its commander, would be with the vanguard, in this case with the three companies a mile ahead; for the regulations say on p. 149, sec. 148, (1) ("I. D."): "He (the commander of the advanced guard) will usually accompany the vanguard."

On the whole, this or the former case would here not make much difference, and we will assume the former.

Under our assumption the officer commanding the half-battalion in front will have, as commander of the advanced guard, precise instructions how to act in case the enemy is met; for the "Infantry Drill," on p. 149, sec. 148, (1) and (2), says"The commander of the advanced guard should receive clear instructions on the subject of engaging the enemy. But these instructions must necessarily allow considerable latitude to his own judgment and discretion. He should, however, be perfectly informed of the general intentions of his superior, so as to enable him to frame his action in accordance with these intentions. . . .

"The commander of an advanced guard must avoid becoming seriously engaged in any way at variance with his instructions, or in a manner that may disarrange the plans of his superior as far as he has been made acquainted with them. But as the work of the advanced guard is to prevent the force it is covering from being retarded or molested in its march, he must not hesitate to attack and drive in the enemy's advanced parties that he may come in contact with, when not in superior force."

This requires for our purposes some explanation. The tactical situation is the following:—

The head of the advanced guard is stopped by fire, and acted as previously stated. The commander of the advanced guard has not received the report about the enemy, but only the general; he hurries forward, and is probably on the spot before the commander of the advanced guard has had time to find out what is in front of him, and long before he had a chance to make up his mind

how to act; for, however precise his instructions may be, in actual warfare he cannot go headlong against anything which fires at him; he is bound to feel his way somewhat, and that takes time. Meanwhile the general has arrived, and he will supplement his former instructions, and take command of the whole before the commander of the advanced guard could have acted.

The whole force involved is too small, and its action partakes of that of an advanced guard itself, to which the above-quoted regulations apply. It becomes here, therefore, quite apparent, as has been said before, that for the solution of this problem it is quite indifferent whether the force here is independent or an advanced guard of a larger body.

The force is in pursuit of a defeated enemy. Under what instructions it acts is not precisely mentioned in the question; but "state what dispositions you would make in order to force the enemy from his position" must be taken to mean that something like: "you will pursue the enemy and attack him whenever met," or "drive him away whenever he attempts resistance," precedes that sentence. Such is implied in the term "defeated" enemy.

On p. 143, sec. 142 ("I. D."), we read—

"The general duties of an advanced guard

- "(1) To search for the enemy, and guard against surprise.
- "(2) When the enemy is met, to push back his advanced troops, and prevent the march of the force from being interrupted.
- "(3) If the enemy is met in superior force, to check his advance so as to enable the necessary dispositions for opposing him to be made."

And further, on p. 145, sec. 144 (4)-

"As long as the enemy is not met in superior force it will be the duty of the advanced guard to attack and drive back any hostile troops it encounters. If the enemy be found occupying a position in superior force, the commander of the advanced guard must act in accordance with the special instructions he may have received for such a case. If the enemy be met advancing in superior force, the most favourable ground at hand should be at once occupied, with a view to checking his advance. How far the defence of this position should be continued depends on whether the commander of the force intends to move up in support of the advanced guard, or decides to fight on some position in rear. In the latter case the advanced guard should fall back fighting and delaying the enemy's advance."

The student will have noticed that only part of all this applies, and should be clear in seeing now what tactical principle is involved, namely,—

For the half-battalion composing the advanced

guard, the troops in the south-east corner of Shaw Wood, in Morton and Parton, are the enemy's advanced troops, which it should "push back to prevent the march of the force (three and a half battalions and two batteries) from being interrupted."

Having done so, it will "find the enemy occupying a position in superior force," viz. on Garnant Down (two battalions and three batteries), when "the commander of the advanced guard must act in accordance with the special instructions he may have received for such a case."

We have seen that the general will be on the spot, and he will give that "special instruction;" in fact, the moment he arrives he has to come to a determination how he will act in regard to the enemy's advanced troops, and then to turn over in his mind "the dispositions he will make to force the enemy from Garnant Down;" for we know the officer commanding the half-battalion of the advanced gnard has not had time yet to act.

The general then determines-

To clear at once Shaw Wood, to enable the artillery to take up a position on the ridge above Fleet Valley, to seize Morton and Parton without delay with the troops at hand in order to secure the bridges, and to hold these villages until the whole force is ready to cross and attack Garnant Down.

This is WHAT has to be done and must be done,

for we are to force the enemy from Garnant Down.

But now comes the question How it is to be done, and here it is where skill steps in, and when orders must be issued, in which the tactics of the general crystallize.

He ought not to fight for fighting's sake—he only does fight because he cannot gain his object as a rule otherwise; but he ought, without sacrificing the least iota of the object he wishes to gain, to dispose and handle his troops in such a manner that they gain an easy but thorough victory, ending, if possible, with the annihilation of the adversary, completed by a well-directed pursuit. Skilful dispositions and a proper framing of the orders to the troops to carry out these dispositions will lead to it.

Unfortunately the regulations indicate only, scattered throughout the book, the points an order disposing troops for attack or defence should contain, neither does the authorized text-book, Clery's "Minor Tactics," give any precise information thereon to the eager student.

I think, therefore, that I cannot do better than translate the paragraphs treating on this point in the authorized German text-book on tactics used at the Royal Prussian War Schools, which are an equivalent to the English Royal Military College at Sandhurst.

This book says-

"The written order is the rule when troops are disposed by superior commanders from the division upwards. Even if the order can be given verbally—for instance, when troops are assembled at a rendez-vous—it is dictated, if of any length.

"One has to distinguish between 'operation'orders (corps, division, detachment, advanced
guard, and outpost orders), which have only
reference to the movements of the troops, and
daily orders, referring only to daily routine, reports,
supply, etc.

"Both are issued separately.

"(If special orders—communications with magazines—are to be issued to ammunition columns and army service corps, they will be as such distinguished, and only communicated to those concerned.)

"An 'operation-order,' besides following the general principles previously mentioned in regard to communications in writing (for our purposes here irrelevant), must fulfil the following requirements:—

"1. The order must be SIMPLE, CLEAR, and written as BRIEFLY and DECISIVELY as possible, taking into consideration the mental capacity of the receiver. He who issues the order must therefore imagine himself very vividly to be placed in the position of the receiver. Misunderstandings are mostly the fault of him who orders.

- "2. The order must also be CLEARLY ARRANGED. Orders of any length, in which the actions of different bodies are prescribed for a common purpose, are divided up by numbers, whereby the important is mentioned first, and everything is mentioned under the same number, which is naturally connected with it.
- "3. The order MUST CONTAIN everything, and, on the other hand, should also only contain what the subordinate cannot on his OWN ACCOUNT AND RESPONSIBILITY order, for gaining the object. One should therefore avoid meddling with details belonging to the sphere of the subordinate leader.
- "4. The order must not contemplate the carrying out of anything which cannot be foreseen with some certainty. Dispositions which go into detail, or such as anticipate time, can rarely be carried out to their fullest extent; but particularly such orders must omit all detail, the despatch of which require some time, within which the circumstances may have altered, or when issuing the order it cannot at all be foreseen under what circumstances it will have to be carried out.
- "5. Conjectures, expectations, minute prescriptions for all eventualities which possibly may arise, are to be omitted, for they are, if something else happens, little conducive to strengthen the confidence of the troops in leadership. Just as little is it admissible to embody in an order the

REASON for it, since, if the order is properly worded, it will sustain itself.

"The order, for instance, for an advance can be worded in the following manner:—

"Place. Date. Time.
"(right hand upper corner).

"Heading (e.g. Detachment Order).

- "1. Report about the enemy, as far as of importance to the subordinates, and news about other friendly troops, as far as their march or position may influence one's own march.
  - "2. One's own general intentions, as far as it is necessary to communicate such to the troops. The better the subordinate is informed of the intentions of the leader, the better he will be able to aid him without orders to gain his object.
  - "3. Dispositions for the 'independent cavalry' (i.e. starting-point and time, road to be followed, reconnaissance, or, according to circumstances, distinct order up to which point, whenever possible, patrols are to press forward).
  - "4. Dispositions for the advanced guard (i.e. starting point and time, reconnaissance, special duties).
  - "5. Dispositions for the main body (i.e. distance at which to follow the advanced guard, or starting-point and time).
  - "6. Dispositions for a *flank guard* which may be formed (similar to (4); under certain conditions

mentioning the place from which the flank guard is to branch off).

- "7. Dispositions for the heavy baggage and ammunition columns and trains as far as concern the troops.
- "8. Place of the commanding officer for the beginning of the march, in order that reports may reach him without delay.

"Name and rank.

"At the end of the order is briefly to be noted the mode how it was communicated (e.g. 'verbally to the assembled leaders,' or 'dictated to the adjutants,' or 'verbally to the main body, in writing by orderly to the right flank guard').

"The order of march and subdivision of the troops are, as a rule, noted marginally on the left of the order.

"Number (3) would be omitted if the cavalry, instead of being formed independently, had been attached to the advanced guard; the order for the advanced guard (perhaps also for the flank guard) would then have to be supplemented.

"Dispositions for a RETREAT are only communicated to those nearest the commander, and always only confidentially.

"Telegraphic orders are to be worded as briefly as possible, yet intelligibly. Conventional polite addresses are omitted. Special attention is to be paid to the time of despatch and arrival as particu-

arly important, on account of frequent interruptions and delays."

At another place this text-book, when treating on the attack of a position, says—

"THE ATTACK ON A FULLY DEVELOPED, PER-HAPS EVEN PREPARED DEFENSIVE FRONT, must be a planned one by the leader from its beginning, such that, as a rule, an order for the attack can be issued in common for all troops.

"Such an order for the attack might contain-

"Place. Date. Time.

- "Heading (e.g. Detachment Order).
- "1. Information on the whole situation (enemy and co-operating friendly troops).
  - "2. General intentions.
  - "3. Order for the artillery (position, object).
- "4. Order for the secondary attack (quite general) and the main attack (road, object).
- "5. Order for the reserve (troops, distance at which to follow or where to be placed).
- "6. Order for the cavalry (as a rule on both wings).
- "7. Special directions (e.g. regarding company ammunition waggons, employment of engineers, establishing ambulance on the field, etc.).
  - "8. Order for the heavy baggage.
  - "9. Place of commanding officer.

" Signature.

<sup>&</sup>quot;Mode and manner how the order is issued to the troops."

The latter form of order concerns us here chiefly, as the force is to attack a position.

All that has been so far written, flashes through the mind, and must be more or less considered when solving this problem in an examination.

Practice will embrace it at a glance, but half the time allotted for the solution of the question should be devoted to this process of development.

The student who has carefully followed the above will now be able, probably without my aid, to frame the order, i.e. give his answer to the question asked in the examination, and should attempt it before reading on. He can then compare and test whether he has gained or not.

One comfort I will give him. It is often said that the examiner has laid a trap in such and such a question, and if it is not solved in a certain way the marks will be missed. That is impossible. No trap can exist for any one who has grasped the tactical principles and knows how to apply them. Trap or no trap, the candidate who cannot do so is caught anyhow. The truer the solution is, the simpler will the answer turn out, like every truth in nature. This is the best test the candidate can have to judge for himself whether he is more or less right; for hardly any one who has sound senses as an officer can be absolutely wrong. Think correctly, and you will act correctly.

We proceed, then, to discuss-

## II. The Production of the Order.

This is essentially the answer which the candidate is required to give, and what I propose as the least he should write and hand in is printed in italics. It is better if he can give all that follows up to the end of this part, but his time will probably not admit of it.

The general riding at the head of the main body, when receiving the report about the enemy, will at once gallop forward and take up a position on the knoll 775 (not numbered on the map), north of Longside and south of western part of Shaw Wood, arriving there about 9.15 a.m. From here he will send back those who have brought in the reports about the enemy with the following order:—

"To O.C. 1st Cavalry Regiment at bridge 2. "Knoll 775, north of Longside and south of Shaw Wood, "7th of September, 1892, 9.15 a.m.

"Remain in observation. Ascertain whether, and how strongly, Shefford is occupied. Try to send one squadron on footpath through Arden Forest, but not debouch from there. Seize opportunity to charge by Mickley Mill when enemy forced to leave Morton. Report to knoll 775, and await further orders at bridge 2. Hand this to next in command, and repair to me on knoll with least delay.

"X. General.

<sup>&</sup>quot;Handed written to: Orderly.

<sup>&</sup>quot;Pace: trot."

Arrival of orderly at bridge 2: 9.30 a.m.

Arrival of officer commanding regiment at knoll: 9.45 a.m. (about).

"To O.C. 2nd Cavalry "Place, date as above, 9.17 a.m. Regiment at bridge 7.

"Remain in observation. Ascertain practicability of footpath through Pewsey Wood, and, if so, send squadron through it unobserved into valley; do not debouch from northern exit, if visible to enemy's artillery. Ascertain by road F D whether, and how strongly, Challow is occupied. Report to above place, and await further orders at bridge 7, which is to be held, as also bridge 6. Hand this to next in command, and come with least delay to knoll 775.

"X. General.

" Handed written to:

Orderly.

" Pace: trot."

Arrival of orderly at bridge 7: 9.33 a.m.

Arrival of officer commanding regiment at knoll: 9.50 a.m. (about).

Before these orderlies have been despatched, the whole of the advanced guard (half-battalion) will have arrived at Longside, and immediately after their despatch the general will give the following order verbally to the officer commanding the advanced guard:—

"My adjutant has told you the reports received about the enemy and the position of our cavalry.

Send a company of the main guard by road "I" unobserved into south-west corner of Shaw Wood, to attack without hesitation in the direction of road Olton Hill-Morton, another company to follow in support. With the company of the vanguard attack south-east corner of Shaw Wood as soon as those companies are heard to be in touch with the enemy. Follow up this attack at once with all three companies, rush the bridge, secure Morton, examine the bridge for mines, repair at once if damaged, report result, and await further orders, holding Morton firmly. At the same time the fourth company will, in a direct line from Longside, and without delay, drive the enemy from Parton, and act there as prescribed for the force against Morton. This company will endeavour to rejoin the others towards the front by way of Shape Copse on arrival of troops of equal strength from the rear."

Time when this order can have been executed: about 10.15 a.m.

The general will next send the following order to the officer commanding the main body:—

"To officer commanding main body.

"Knoll 775, etc.
"7/9/92, 9.20 a.m.

"Send the batteries at a trot through Longside, to take up a position under cover, ready to unlimber on the ridge south of south-east corner of Shaw Wood, somewhere between this wood and the Longside road, halting under cover north-east of Longside if Shaw Wood is not cleared of the enemy. The infantry will continue its march, pass through Longside, and rendezvous in quarter column under cover, north of Longside road. I will see the battalion and battery commanders at 9.50 on knoll 775.

"X. General.

"Sent verbally by: Orderly Sergeant.

"Pace: gallop."

Time of probable arrival of batteries on ridge: 9.40 a.m.

Time of probable arrival of main body at place of rendezvous: 9.50 a.m.

Awaiting these orders to take effect, it being now about 9.20 or 9.25, the general will watch the course of events, endeavour to obtain a view beyond the Fleet Valley to shape his further plans, leaving a staff-officer or an orderly on the knoll to direct to him any incoming reports, and will return at 9.50 to knoll 775, at which time also the bulk of the main body will be in position as stated.

He will then make the following disposition, embodying it in a verbal order addressed to the commanding officers, who all will have meanwhile arrived, an adjutant noting in writing the salient points of the order, or the order fully, if he is a shorthand writer; this for reference, when reporting on the action to superior authority.

## DETACHMENT ORDER.

" Knoll 775, etc. "7/9, 9.50 a.m.

- "(1) The enemy is reported to occupy Garnant Down with two battalions and three batteries, with small advanced posts holding Morton and Parton, and apparently the south-eastern edge of Shaw Wood. The advanced guard is ordered to clear this wood, seize Morton and Parton, and hold both until further orders. The company at Parton is ordered to rejoin its half-battalion as soon as relieved from the main body. The cavalry at bridges 2 and 7 is watching the enemy, each regiment having probably a squadron near Shefford and the northern edge of Pewsey Wood.
- "(2) My intention is to drive the enemy from Garnant Down as soon as the bridges at Morton and Parton are in our hands, and if possible to cut off his force with the aid of our cavalry.
- "(3) The batteries will open fire on the enemy's artillery from the position indicated as soon as Shaw Wood is clear of the enemy, sustaining the infantry attack until the position is carried, and then moving up to Garnant Down by the shortest route without any further orders.
- "(4) The remaining half-battalion of the battalion furnishing the advanced guard will at once move up in support of the companies attacking Morton, detaining the enemy in front until the attack of the main force is fully developed. Battalions Nos. 2, 3, and 4

will immediately cross at Parton, and attack Garnant Down by way of Shape Copse and the Challow Valley; one battalion first line, one and a half second line. The third line will be formed by the reserve.

- "(5) One-half of No. 4 battalion will remain in Parton at my immediate disposal as a reserve.
- "(6) The regiment at bridge 2 will send half a squadron by way of Shaw Wood as escort for the batteries. If the footpath through Arden Forest is found practicable and Shefford unoccupied, the whole regiment, leaving half a squadron at bridge 2, will move on to this village, ready to fall upon the enemy when driven from Garnant Down. The regiment at bridges 7 and 6 will move on road D towards Challow, withdrawing the squadron from Pewsey Wood, and be ready to charge and pursue the enemy.
- "(7) The whole of the regimental ammunition will follow the 1st battalion into Morton. One cart and one mule will follow each half of the other battalions; the remainder will park under cover of Parton. The ambulance will establish a hospital at Longside; the slightly wounded will be attended and retained at Morton and Parton.
- "(8) The heavy baggage will park outside the east entrance of Longside.
  - "(9) I shall be with the batteries.

"X. General.

"Verbal: to assembled com. officers.

"Taken down in writing by: Adjutant, This completes the dispositions.

It is now about 10 o'clock, and the movements can begin from the moment the commanding officers arrive at their respective units, which for the farthest will be about 10.15 a.m.

It remains now to treat-

## III. Testing the Value of the Order.

This means, as explained in the introduction to these pages, giving reasons for everything that has been ordered and written in the previous part.

Here again is printed in italics what is the least the candidate should hand in. Much will be a repetition of what was kept in view in Part I., and, as this study is not meant to give merely a solution of the problem, but also some instruction how tactics in general should be learnt and applied, much will be said which it is unnecessary to write in an examination.

On the other hand, it is impossible that all the points can be touched which may seem to require explanation, as it would lead beyond our limits, and, besides, the subject is inexhaustible.

At the beginning of Part II. we read the general arrives on the knoll 775 at 9.15 a.m.; for as general in command of the whole independent force riding at the head of the main body, he is separated by about one and a half to two miles from his

leading troops, and assuming his rate of progress to be eight miles in one hour, it takes him about fifteen minutes to cover that distance. He goes to the knoll, since this position affords him the best view of the country immediately concerned, is beyond effective rifle range, and is on ground already traversed by his advanced guard; for he could not go very well beyond his own furthermost troops.

When solving these problems reality is too frequently overlooked, and positions are assigned to commanders which they would never be able to take up, or often their position is never indicated, which is worse. Reports must always find him readily and quickly, and therefore the less he moves the better for the direction of the whole. Riding about and going too near the smaller units, seeing perhaps details in movements not to one's taste, and vet unimportant for final success, are not conducive to the calmness so necessary in a commander. There are naturally phases in an action, when it seems to have come to a standstill, requiring a fresh outlook for the commander to rearrange badly executed orders or such as were given under a wrong impression, or a new phase has been entered upon necessitating closer observation by the commander.

Imagination combined with reasoning power, a fiery nature tempered by a good deal of patience,

should be assumed as characteristic of the commander. If these qualities appear in the answer a candidate gives he is likely to find favour with an examiner.

It was considered necessary to send the orders to both cavalry regiments, for it is important to know how far actually the position of the enemy extends, and whether he receives reinforcements. A squadron should attempt to penetrate Arden Forest on the footpath, because it is well to know whether the cavalry can be near the line of retreat. ready to cut into the artillery when it is forced to retire, and when perhaps its escort has been forgotten. The squadron should not debouch and show itself to the enemy, for it is unlikely that the enemy would be induced to give up his position without fighting, by the mere appearance of cavalry. It would only induce the enemy to take precautions which he might otherwise neglect. We could of course adopt bold tactics, send the whole regiment to Shefford, dismount some men, and make the enemy believe he had to deal with infantry. He might evacuate his position, fearing for his line of retreat, and we gain it without much bloodshed. There is absolutely nothing wrong if a candidate disposes thus; for, if the movement has not the desired effect, nothing is lost and the general can still dispose afterwards as we have done; only the retreat of the enemy would not likely be so effectually cut off afterwards, for the cavalry regiment might become useless for further action on that day.

Bold tactics on paper will have the effect of producing overcautious tacticians on the battle-field. Officers conducting a "Kriegspiel" will probably testify to this, that players knowing war only from theory are bold in their dispositions, and officers who have been "tried and were not found wanting," and whose experience is tempered by theory, will usually give the impression to others of being too cautious. In both cases the effect is the same, only the mode is reversed.

The object of the fight tactically should be the annihilation of the adversary, no matter what strategy prescribes, and those dispositions are best which will have the greatest chance of gaining this end. If there is no longer an adversary, the position, the town, the province, the country, or other object is merely the ripe apple.

It must not be forgotten that some cavalry should remain to cut off the enemy's advanced posts, when driven back.

In the order to the cavalry at bridge 2 it is not mentioned, as in the order to the cavalry at bridge 7, that the bridge should be held, because there would be no object in it, the river being passable above Morton.

The regiment at bridge 7 has a good road to Challow, and can be in ample time to fall upon the

enemy, when he is driven from Garnant Down. One squadron should try Pewsey footpath, in order to be at hand to disperse the enemy's retreating advanced posts, for the squadron would probably not be in time to effect this when starting from bridge 7.

The regiment is also wanted at bridge 7 to secure it as well as bridge 6 for the force, in case Parton bridge has been demolished, the distance from Parton to Morton, or to these bridges, being about the same, but the latter being safer for crossing.

The general summons both regiment-commanders, because personal intercourse is always preferable to written orders, whenever possible.

The orderlies have to ride from the knoll to their respective bridges, a distance under two miles, which would take them about fifteen minutes, going eight miles in one hour. It takes also some time to write the orders. The officers commanding the regiments, taking the same time to repair to the knoll, can therefore arrive at about 9.50, as stated.

The advanced guard, stretching over about half to three-quarters of a mile, and marching at the usual rate of three miles an hour, would be in Longside by the time these orderlies are sent off.

Knowing from the reports of the cavalry that the advanced guard has to deal only with small parties, the general orders it to drive them away and secure the bridges. The commander of the advanced

guard, as stated repeatedly, could not have acted, because the time was too short, and, besides, he could only gain precise knowledge about the enemy after the general came up. The general would naturally now assume direction of the advanced guard, and employ it as might best fit his general plan.

He uses three companies against Shaw Wood and Morton, because they lie on the most direct line towards Granston, and the most natural instinct is, if you feel strong, to go straight for your adversary.

A commander is, of course, to a certain extent, in a different position from a single man; he has to consider many things, and above all, he should always ask himself, how can I arrive at the most decisive result in the shortest possible time with the least amount of loss to my own troops?

On second thoughts he will frame then his proper dispositions, and he can only do so here, after driving in the advanced posts and viewing the enemy's main position.

Shaw Wood must be cleared before the artillery has any chance to take up a position against Garnant Down.

The general orders the leading company to hold the enemy in front until two other companies pass unobserved into and through Shaw Wood, cutting off perhaps what is in the south-east corner, because if he would send that company headlong into the south-east corner, he has nothing in his front, and the enemy might come out in force from Parton, for there is no certainty in war, and what might have been only weak forces in Parton, as reported by the cavalry, may have become strong ones in the mean time, before fresh reports have reached him.

He sends only one company against Parton, because at first sight this village lies too far away from his line of attack, and he wishes to keep his small force concentrated; yet he must occupy the enemy there, if he cannot succeed in taking the bridge and village of Parton at a rush, in order to succeed more easily at Morton. Besides, the artillery, when coming into action, might be molested too much by the hostile infantry at Parton, if it were not occupied.

The bridge at Morton is not so important, as the stream can be crossed immediately above Morton; yet this would cause delay, and be probably under hostile artillery fire. The bridge at Parton is more important to get possession of, if the main attack is to cross over it. The general directs, therefore, the main body to halt outside Longside to await the reports of the advanced guard about the bridges, as only then can he decide which way to move.

The companies are ordered not to go beyond Morton and Parton, because they are too weak to follow up success, and may be driven in, and the passages lost by a counterstroke of the enemy before the main body can take part in the action.

Tactical units should be preserved and always be re-established as soon as practicable, when necessity has caused a rupture, and, therefore, the order contains directions for the company at Parton to seek re-union towards the front.

The reason why 10.15 a.m. is given as the time when the verbal order to the advanced guard can have been carried out is, that the distance from Longside through Shaw Wood to Morton is about one and a half to two miles, which would give thirty to forty minutes, going at three miles an hour. But in an action, however weak the resisting forces, the progress is naturally, as a total, slower; therefore, about one hour has been allowed, namely, from 9.20 a.m., when the movements begin, to 10.15 a.m., when they may be considered completed.

The next order—that for the officer commanding the main body—was found necessary because the regulations say, on p. 175, sec. 15 ("A. D."):—

"The action of the artillery of an advanced guard will depend upon the instructions given by the officer commanding the troops to the officer commanding the advanced guard.

"It should not be less than a battery, and the ammunition wagons should be with the battery.

"The advanced guard may be called upon to drive the enemy, if in small force, from a position

in which he might delay the advance of the main body. As the essence of success in this case is to prevent the enemy from gaining time, the artillery must be prepared to commence action at once at a decisive range.

"If on the other hand the object of the officer commanding the advanced guard is to delay the enemy until his main body can come up, the artillery will open fire as soon as the enemy becomes visible, firing slowly at 'distant' ranges, but holding its ground at any risk should the enemy make a serious attack."

The problem here is practically an advanced guard action, and the half-battalion should not be delayed in the capture of Morton and Parton; if, therefore, Shaw Wood causes such delay, the artillery is at hand to support the attack from knoll 775; it is otherwise directed on to the heights bordering Fleet Valley, to remain there for the present under cover, because the commander has not had time yet to reconnoitre from those heights the position at Garnant Down.

The infantry of the main body is directed to rendezvous outside Longside, for the reason explained when treating on the order for the advanced guard.

The arrival of the artillery at 9.40 on the heights bordering Fleet Valley is estimated as follows:—

When the sergeant is despatched it is 9.20. The

advanced guard having arrived, the head of the main body is less than one mile off. Whilst he gallops back, the main body advances to within perhaps half a mile, which would be covered by him in about three minutes; the batteries trotting one and a half mile to the position, with a quarter of a mile added for their length before they are in it, would take them about thirteen to fifteen minutes. From the despatch of the sergeant to the arrival in position would elapse, therefore, about 3 + 13 or 3 + 15, say 20 minutes, which means 9.40 a.m.

The general has disposed to assemble the commanding officers at 9.50 on knoll 775, because he has roughly estimated that by that time every one can be present; because by personal intercourse he can hear more from the cavalry leaders about the enemy and his position, and can in a shorter time issue the necessary orders; and because, till then, he has had time to make up his mind how he will dispose to force the enemy from his main position.

The regulations on p. 120, sec. 124, (16), and p. 98, sec. 112, ("I. D.") say:—

"Before assuming formations for attack, an officer commanding any body of troops will explain to those under his command the points in the enemy's position he proposes to assault, and the manner in which he purposes to carry out the attack. He will draw attention to any peculiarities of ground he

wishes turned to account during the advance, and prescribe which part of the force is to direct.

"He should also point out any ground that might favour the enemy in threatening the flanks of the attacking force, and explain the dispositions necessary to guard against a flank attack, should it be made.

"The orders for the distribution must be clear, concise, and complete. To secure united action it is necessary that a definite object of attack or specific duty should be allotted to each body of troops; the orders should, if practicable, be given in writing to their commanders, the choice of the manner in which the duty is to be performed being left to them. The object aimed at, the direction and compass bearing of the attack, and the extent of frontage to be occupied, should be distinctly stated. If an enveloping or flank attack be intended, it should be provided for in the primary distribution."

The student should test here whether the "detachment order" given contains all these points, and where they are, and how they are expressed.

The "reasons for the plan (apparent in the order) proposed," "to force the enemy from his position," are that—

By holding him in check in front, where a direct attack over the glacis-like slope would be very costly, the main attack can be delivered under better cover, therefore probably with less loss, and on the left flank, which is the most vulnerable part of the enemy's position; for Shape Copse, being too extended for the enemy to hold with his weak force strongly everywhere, should be easy to capture when the position is practically won.

By using the cavalry as proposed the enemy's line of retreat is seriously threatened when evacuating the position, and the whole force might be obliged to lay down its arms, and thereby effectually disappear altogether from every further field of action.

By using the artillery in the manner prescribed, it is in a position where it best can prepare and aid the infantry attack up to the very last moment, where it is secure against surprise, and from which it can readily move, being near the road, by Morton on to Garnant Down, when necessary. The position on knoll 920, north of Shaw Wood, perhaps equally good, is not chosen because it is farther off from Garnant Down, and therefore the fire probably not so effective. That position is also higher than the one chosen; but it would take longer time before the artillery could come into action there; and, besides, it would not be so easily controlled by the general.

The attack of the brigade is delivered on a front more extensive than that usual for a brigade, namely, half a mile to one-third of a mile; but by the concentric movement from the villages, on Garnant Down, all the forces will unite at the final moment, and it is considered that these frontages are laid down only as a guide for the distribution when large bodies acting together and not independently are concerned.

A battalion for the secondary attack from Morton is considered sufficient, because if the enemy should sally out and make a counter-attack against it, such would be flanked by the forces advancing from Parton into Shape Copse.

The troops to make the real attack are disposed with one battalion in first line, one and a half battalion in second line, and half-battalion in reserve, or third line, because the second line, delivering the final assault, should be strong enough to do this, and at the same time be able to guard against Challow, and fill up a gap between the troops delivering the main and secondary attacks. The third line or general reserve consists only of half a battalion, because against a previously defeated and apparently weaker enemy a reverse is not so likely.

(Here should be added briefly the calculations of the time when the dispositions of the general would be completed; they can be readily gathered from what has been given further back, namely, how the time is filled up from 9 a.m. to 10.15 a.m.")

These reasons are based on the following regulations:—

"I. D.," p. 96, sec. 110, (1) and (2). "The commander of the force will base his plan of attack on the information gained by a thorough reconnaissance

of the enemy's position and the approaches to it. If it be found to offer no cover to troops attacking, he should seek to attack a flank, or threaten the enemy's rear, in preference to attacking him in front, as, unless the ground offers peculiar advantages for the artillery of the offence, a direct attack across open ground is costly and difficult.

"During this reconnaissance, the main body of the infantry will close up from column of route, and will, in convenient situations for the subsequent advance, form mass or line of battalion quarter columns, or other suitable formation beyond the range of the enemy's artillery, or nearer, if sheltered by the formation of the ground."

"I. D.," p. 97, sec. 111, (1), (2), (3), (4). "When the commander has decided generally on his plan of attack, orders for the distribution of the force will be issued.

"The general principle on which troops are disposed for an engagement is that they are formed in greater strength, especially in depth, opposite the point or points where it is intended to drive the attack home, and in lesser strength opposite those portions of the enemy's line where it is intended merely to hold him to his ground. Their distribution should, in every possible manner, be concealed from the enemy.

"An attacking force is formed into three bodies distributed in depth: the first to develop the

attack, the second to support and carry it out, and the third to confirm a success, cover a retreat, or meet any emergency.

"There is a further reason for distribution in depth, and it applies to the smallest fractions of a force in the same degree as to the largest. A commander can only exercise a direct influence on his command so long as he retains at his disposal a portion of his force with which to meet the varying contingencies of an engagement. Without a body of troops in hand, he can neither develop nor support an attack, nor is he in a position to meet any unexpected movement on the part of the enemy, such as the sudden assumption of the offensive in force.

"It is not here intended to imply that the force is to be at once distributed in the form in which it will actually carry through the attack to its conclusion; the distribution should, on the contrary, be limited to that form which lends itself most readily to the development of the plans the commander has immediately in view."

- "I. D.," p. 128, sec. 127, (3). "... If a brigade be ordered to assault and carry a particular point in the enemy's position, its frontage should not exceed about a third of a mile, and may be required to be less. . . ."
- "I. D.," p. 117, sec. 124, (7) and (8). "... The troops destined for the second line will ordinarily be about equal to, or slightly greater than those in the

first line, and the third line will vary from one-fifth of the whole force employed to, in a large force, one-third, or even one-half if the enemy be outnumbered.

"The frontage allotted to an attacking force should not exceed that which the troops composing its first line would cover were they deployed two deep."

"I. D.," p. 98, sec. 113, (1), (3). "The commander having given his cavalry and artillery commanders full information as to his proposed plan of attack, the mass of the artillery will be brought into action, protected by the infantry of the advanced guard and cavalry.

"Fire will be opened simultaneously at a range that must, to a great extent, be determined by the configuration of the ground, subject to the general rule, that artillery in its first deployment should avoid coming within long range infantry fire."

- "I. D.," p. 99, (1). "Under cover of artillery fire, the infantry will now be ordered to advance to the attack. . . . As the attention and fire of the hostile infantry becomes directed on the infantry of the attack, it may be advisable to advance the artillery to closer ranges, whence it will, at all hazards and regardless of losses, support the infantry advance."
- "I. D.," p. 96, sec. 108, (4). "The subsequent action of the attacking cavalry will depend on the

nature of the ground and the number and distribution of the hostile cavalry. Patrols should, however, remain in observation of the enemy's flanks to give timely notice of any impending counter-attack. If the ground be favourable, the attacking cavalry will be best employed in vigorous action against the enemy's flanks, and against the hostile cavalry; but in any case it should remain in observation of the enemy's proceedings."

The conditions for the choice of a position for the artillery will be found in the "Artillery Drill," p. 156, sec. 6, to which I can only refer the student. I must also, as regards orders for the ammunition of Infantry, refer him to the "Infantry Drill," pp. 135 to 138, sec. 132.

For the baggage the following is prescribed:—

"I.D.," p. 139, sec. 133. "Distinct orders should be issued as to the exact position to be maintained by all transport proceeding with or following any body of troops."

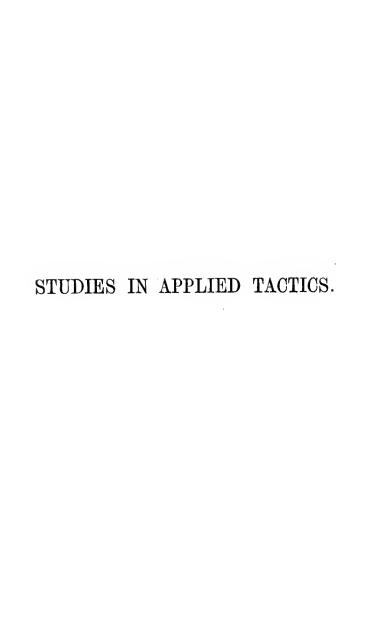
The position of the general commanding is defined in the "Infantry Drill," p. 127, sec. 127, (1), as follows:—

"The officer commanding an attacking force should be where he can best watch the troops engaged, issue his orders, and receive reports, and should arrange for instant communication with those troops which he keeps in hand at his own disposal. He will notify to those under his command

where he is to be found. If he quits his position, he will leave a staff officer to state where he is to be found. It is equally the duty of officers commanding battalions, brigades, and divisions, to keep themselves at all times acquainted with the position of their immediate commanders."

## CONCLUSION.

If these pages have incited the student to solve the problem better, the writer considers that they have fulfilled their purpose.



# STUDIES IN APPLIED TACTICS.

GUIDE FOR OFFICERS PREPARING FOR TACTICAL EXAMINATIONS.

BY

### KARL VON DONAT,

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(NOW "REGIMENT COUNT ROON"),

AND FOR THE LAST THIRTEEN YEARS PREPARING OFFICERS, ETC., FOR MILITARY
EXAMINATIONS IN ENGLAND.

"Tactics crystallize in the orders to the troops,"-K. v. Donat.

PART II.
WITH MAP.



#### LONDON:

WILLIAM CLOWES & SONS, LIMITED, 13, CHARING CROSS, S.W.

1893.

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### PREFACE.

THE Author is grateful for the kind and encouraging criticism, which his first little volume has met with, both publicly and privately, and hopes that this second one will find a like favourable reception.

With regard to certain remarks on tactical examinations in general and particular, which are made in the text, the author would willingly have withheld them; but he thought it would serve a good purpose to take the present opportunity of speaking out, and that reticence would be rather a shirking of duty.

I desire to acknowledge the kind assistance which I have received from Lieut.-Colonel John Graham in the revision of the manuscript of this and the first part of the series.

KARL VON DONAT.

4, Canning Place, Kensington Gate, London, W., October, 1893.

# STUDIES IN APPLIED TACTICS.

#### PROBLEM 2.

(Vide Official Report, Promotion Examination, November, 1891.)

N.B.—"It may be assumed that the Fleet River is impassable below Morton, except at the bridges.

- "You are in command of a similar force to that given in question 1 (four battalions of infantry, two batteries and two regiments of cavalry), and are acting as the rearguard of a body of troops which is retiring to the north, up the Fleet Valley.
- "State how you would proceed, given the following conditions:—
- "(a) The enemy is three miles to the south of Newtown (where your troops are cantoned), at the moment when you receive orders to delay his advance sufficiently to gain time for the passage of the Forest of Arden by your main body.
- "(b) The roads through Ashley and Challow are guarded by other detachments."

#### SOLUTION.

#### I. Considerations.

To commence with, one must imagine one's self in the position of the commander of the rearguard.

In actual warfare he would know, when he receives the orders, the exact time of the day, the exact day of the year, and consequently the season (weather), the strength of the main body and its exact position and probable state of preparedness to march off, more or less the exact position, strength and composition of the neighbouring detachments guarding the roads through Ashley and Challow, the exact strength, composition, and position of his own outposts, also whether his force is retreating on account of a previous defeat or otherwise. These are certainly items which would considerably weigh in his mind, and undoubtedly influence the details of the decisions governing his proceedings.

Of the enemy he probably, or almost certainly, does not know much more than is stated in the question. But we may at once assume that the enemy has arrived "three miles to the south of Newtown" with his leading troops only, and that it will take about one hour before they arrive in front of Newtown; probably we can count upon more time as available for the rearguard to make ready for receiving the enemy, as he must advance

more cautiously than with no hostile troops in his front to harass and delay his reconnoiting forces. In addition, the commander of the rearguard may reckon upon the time it takes the enemy's forces to close up.

The considerations, so far, have provided us with an important item, which helps to solve this problem, viz.—

The rearguard has about one and a half hours' time available for carrying out its dispositions to receive the enemy.

The next question is, How long will the commander of the rearguard have to delay the enemy?

If the commander receives the orders in the afternoon, after a day's march, the progress of the main body to get out of the way will in all probability be slower than in the morning, after a night's rest, or after having been stationary, and consequently the delay required of the rearguard will be longer. If the troops have been stationary for some time, retreat is carried out more rapidly, and the enemy's advance and attack are probably less vigorous, owing to his fatigue from the day's march, and consequently not so much resistance is required of the rearguard.

But the problem says that the troops are "cantoned" at Newtown, and they are therefore either stationary, and the orders may then have been received at any hour of the day, or they have slept

only there during the night, and the order is received early in the morning, the enemy having approached so closely, unobserved during a night march.

Again, however, if we read the problem carefully, we must come to the conclusion that the troops have not been stationary, for "you are acting as the rearguard of a body of troops which is retiring to the north up the Fleet Valley."

We have therefore no option left, but to assume either, that the troops receive the orders in the evening, having cooked, fed and rested after a day's march; or, that the orders are received in the morning after a night's rest.

In the first instance, night will soon cover a retreat, and not much resistance is required, for it is surprising how fast retreating troops can march even after a day's fighting; thus, after the battle of St. Quentin, on the 19th of January, 1871, the orders issued to the victorious troops for the 20th of January were: "To-morrow everybody will march twenty-three miles," and yet the remnants of the vanquished were never reached. So much the faster, therefore, will they march, if necessary, after feeding and resting. We can dismiss this case as not a likely one in the mind of the examiner, and assume that the orders are simply received in the morning after a night's rest.

If such is the case, it is astonishing that the enemy could get so close without his approach

being announced sooner by the cavalry patrols of the outposts, thus enabling the main body to get out of the way without necessitating a facing of the enemy by the rearguard. We cannot help thinking that the cavalry must have done its reconnoitring duty decidedly badly, and the troops we have to handle seem to be very indifferent, consequently we cannot risk much with them. It is an advantage of course for the rearguard that the enemy must have made a night march—though he may have come up by rail, only nothing in the problem warrants such an assumption—and cannot be so fresh as we are; yet, from the fact that the outpost duty was done so badly, we here become aware that our force is retreating on account of having suffered a defeat, and is therefore probably morally and physically inferior to the enemy.

The defeat cannot have been suffered the previous day, as the force would most likely have made use of the cover of night to place a day's march distance between itself and the enemy, and not have "cantoned" in such dangerous proximity to him. There is, of course, no limit to speculation how it is that the enemy got within an hour's march the next morning, and whether we have been defeated, and on what day, but such speculation must be cut short by again referring to the question, which says, "the body of troops . . . is retiring," which must be taken to mean that, after a defeat, it did

so yesterday, will do so to-day, and may do so to-morrow.

If the rearguard appears indifferent, the main body will be worse, as for the former the best and most trustworthy troops are usually selected. Much disorder and delay may therefore be expected before the latter is beyond the reach of the enemy; consequently the rearguard will have to resist for some time, yet should not risk obstinate fighting, as it might be driven pell-mell on to the main body before that is beyond the enemy's reach. With troops that have not suffered a defeat previously, and are retreating perhaps for other reasons, a commander of a rearguard can pursue bolder tactics than are here, under our assumption, permissible.

In the previous problem was given a date—the 7th of September—here there is none; but the examiner most likely had the same time of the year in his mind when framing this question; for in winter the river Fleet might be frozen, but it is here assumed to be unfordable; and in summer, at full moon, we might fight almost day and night. During winter artillery and cavalry may have the greatest difficulty even in moving along the roads, and hardly any chance of doing so elsewhere. No special difficulty need be created, and so we assume an ordinary September day.

The rearguard will face to the south, and there-

fore has additional difficulties in delivering its fire and observing the effect, particularly the artillery on account of the sun, should the sky be clear.

Observation of the enemy's movements is also more difficult than when having the sun behind.

The length of time the rearguard will have to resist and fight is considerably influenced by the strength of the main body, by its position, and readiness to withdraw.

As the problem says, "to delay the enemy's advance sufficiently to gain time for the passage of the Forest of Arden by the main body," we can assume the latter to be on this side of that forest.

The rearguard being "cantoned," the main body is certainly also "cantoned," and is so, probably, in the villages Longside, Parton, Challow, and in those north of that line, and in the farms. These troops will all start from their quarters, at the latest, when the commander of the rearguard receives his orders. No delay need be apprehended in collecting all the troops, and putting them into one column of route on the road to "A," for if they were bivouacking at one place near the road, we should have to estimate the time it would take them to get into that column; and this time we may reckon to be the same as marching to the road from the different places, with the troops gradually falling into their correct position in the order of march. Still, the state of preparedness to withdraw is not so great when scattered about in the villages and farms as when collected in a bivouac; additional time must therefore be allowed to admit of a safe withdrawal.

In actual warfare the commander of the rearguard must, of course, know the strength of the force he is covering. The examiner withholds that information from the candidate. We need not inquire into his reasons for this, but must try to supply the want if we consider it necessary to know the strength. The "Infantry Drill" does not prescribe any proportion which the rearguard should bear to the whole force to which it acts as such; all that it says in section 151, 2., is, "The first thing a defeated force requires is to be relieved from the pressure of a too-close pursuit. This is done by detaching a portion of the force to make head against the enemy's advance. . . ."

As a rule, it is assumed that the rearguard, under ordinary circumstances, is somewhat stronger than a similar advanced guard, particularly stronger in artillery, as only that arm is able to force the enemy to deploy for attack at a distance. By the "Infantry Drill," section 145, 1., the advanced guard varies in strength from one-fourth to one-eighth; and assuming here for the rearguard a proportion of one-fourth of the whole force, the main body would be about one and a half divisions, *i.e.* twelve battalions of infantry, minus one or two battalions furnishing the detachments guarding the roads through Ashley and

Challow, and four batteries, all the cavalry being with the rearguard.

The length of that column would be roughly calculated as follows:—

```
11 Battalions
                  .. = 11 \times 350 = 3850 yards.
4 Batteries
                       = 4 \times 224 =
                                       896 -
                  ٠.
Intervals ...
                  .. = 13 \times 25 =
                                       325
Divisional Intervals = 1 \times 50 =
                                        50
          Proper length
                              .. = 5121
          Opening out 25 per cent. = 1280
            Total length of column = 6401
or roughly 31 miles.
```

We can count, therefore, that about one and a half hours will elapse before the last man of the main body will start, if the rate is two and three-quarter miles per hour; and assuming the last man to be at Parton, the tail of the column will be separated from the enemy about two miles, as he will have arrived before Newtown within that time, as previously shown, presuming, of course, that the main body will start with its first troops at the moment the commander of the rearguard receives his orders to delay the enemy.

As a rule the rearguard is also further distant from its main body than an advanced guard.

The distance of the latter being determined by the time it takes the rear of the column which it covers to form up on its front before the enemy could reach the head, that for the advanced guard would be about three and a half to four miles in this instance, and therefore between our rearguard and its main body a distance of at least five miles should intervene.

It was shown that two miles intervene already, and so we have to delay the enemy sufficiently to enable the main body to traverse three miles more, which it will do in one to one and a half hours, allowing for unavoidable delays in such a long column in its passage through a forest defile.

The commander of the rearguard thus knows how long, approximately, he has to delay the enemy at *Newtown* when the latter appears in front of that place.

All these calculations would lead naturally to quite different results if the main body could use the roads through "L" and "B" as well; but they do not pass through the Forest of Arden, so far at least as can be gathered from the map; and such is the condition of the problem.

To the two divisions the corps artillery may also have been attached, which would make the column longer, and necessitate a longer resistance by the rearguard.

The trains encumbering the two divisions are also left out of the calculation, firstly, because their composition is not exactly known; secondly, because a retreating army would probably have sent them ahead; and, thirdly, because the regimental transports can be collected and moved onward at a more

rapid rate than the troops can march to a point beyond the map.

The problem says that "the roads through Ashley and Challow are guarded by other detachments." The question naturally suggests itself to the candidate, Do these detachments belong to the force we are immediately covering, or to other forces moving on parallel roads? I would assume the former, as otherwise the examiner would probably have used the expression, "by other rearguards." These detachments cannot be strong; both are perhaps at the utmost only a half-battalion, being left at Longside and Challow respectively, the former sending perhaps a company to "H," the other two companies to "D" and the southern edge of Pewsey Wood. If these detachments were stronger, wellnigh half of the whole force would practically be employed on rearguard duty.

The rearguard, being "cantoned" at Newtown, has without doubt secured itself by outposts the strength and position of which are unknown, but must be guessed. As an adequate strength I would suggest, half-battalion of infantry, and half-squadron of cavalry.

Their position is mere speculation, for the river might take a decided turn to the west; in that case the cavalry only would be beyond it, the infantry guarding the bridge, and needing less strength than was just assumed; but the river may just as well take such a turn to the east; we shall then have to push the infantry some distance beyond Newtown as support for the cavalry, which can be assumed with its vedettes one and a half miles to the south of the town. The latter disposition will probably also be adopted if the river continues in its general course to the south, which we will assume here as the most natural; in that case we must imagine one troop of the outpost cavalry to be stationed on the left bank of Fleet River, on the road beyond "F," one troop on the right bank on the road "G," a little over a mile beyond Newtown, with vedettes about half-mile in advance; two companies as supports at suitable places half-mile beyond Newtown, and two companies as an immediate reserve at the south entrance of Newtown in an alarm-house, the rest of the rearguard: three and a half battalions, two batteries, and seven and a half squadrons, being "cantoned" in alarm quarters at Newtown, furnishing perhaps with one section of infantry a special guard for bridges 6 and 7 as a lean-to for the cavalry of the left bank.

To summarize the results so far arrived at by the above considerations, we find—

- The commander has one and a half hours' time to prepare his actual rearguard position.
- 2. The orders to delay the enemy's advance are received by him in the morning after a night's rest.

- 3. His troops had retreated the previous day and appear indifferent, as the outpost duty was done badly.
- 4. His operations take place on an ordinary autumn day.
- 5. His main body is cantoned in the villages and farms this side of the Forest of Arden, and consists of one and a half divisions.
- 6. He will have to delay the enemy for at least one and a half hours in the *first position* he takes up.
- 7. The main body retreats on one road only, and has furnished the detachments guarding the Ashley and Challow roads at places and with a force as indicated.
- 8. The outposts of the rearguard consist of a half-battalion of infantry and half-squadron of cavalry, with their foremost troops about one and a half miles south of Newtown.

It may appear that many of these considerations are irrelevant for solving this problem. To my mind they are not so; for a candidate must first of all be clear about the tactical situation, which concerns his force and himself, otherwise he gropes in the dark. He may hit perchance upon a good rearguard position and show the examiner vaguely what is to be done, which is here easy enough, but he cannot show him properly how it is to be done, and this is the point the examiner complains of.

It is an error, at least to my mind, to assume that a vaque tactical problem is difficult to answer properly; for in such a case usually any answer may be right; on the contrary, the more precisely the tactical situation is given, the more difficult it is to give the only correct and only reasonable solution. To substantiate this remark, I point to the question on outposts set for the entrance examination to the Staff College, in 1888, and to a similar question set as late as November, 1892, for promotion of lieutenants. In both cases outposts were to be shown in position across the map, and not even the direction whence the enemy was coming was vouchsafed to the candidate. Certainly any position taken up across the map must have been right, and must have been accepted by the examiner, as long as ground, distances, and proportion of the various bodies according to the rules laid down by the regulations, were duly taken into consideration, although one candidate may have shown his face, the other his rear, to where the examiner had supposed in his mind the enemy to be. Hardly any one will call this a test of applied tactical knowledge. I am writing in the interest of tactics in general, and may therefore be excused for this slight digression from the problem to be here solved. I wish to reassure disheartened candidates.

To resume the thread—

Having made clear the tactical situation as it

depicts itself in the mind of the commander of the rearguard at the moment he receives the orders. and having thus supplied the candidate, who is supposed to be the commander of the rearguard. with what he may have felt to be a want, he will at once sound the alarm for the assembly of his troops at the place or places previously assigned, send the necessary orders to his outposts, give directions regarding any regimental baggage which may still be with the troops in the cantonments; despatch his staff officer or brigade major to reconnoitre the ground north of Newtown in regard to suitable defensive positions, and himself glance at the map, and weigh in his mind how he will best employ his troops "to delay the enemy's advance sufficiently to gain time for the passage of the Forest of Arden by the main body."

In the "Infantry Drill," section 151, 4-5., we read, and the commander of the rearguard will recall to his mind—

"The manner in which a rearguard carries out its mission of gaining time for the remainder of the force to retreat in good order, is by compelling the enemy's troops to halt and deploy for attack as frequently as possible. This is usually effected by taking up a succession of defensive positions, which the enemy is compelled to make dispositions for attacking or turning. When these dispositions are complete, the rearguard moves off and repeats this action on the next favourable ground. All this

consumes time, and time is what is most needed by a retreating force."

"In occupying positions of this kind, two important points have to be observed: one, to show as strong a front as possible to the enemy, the other to make sure of good lines of retreat."

The field of attack is divided into two parts by the unfordable river Fleet. The enemy can attack along the right bank, or on the left, or on both, or he may be attacking on one and demonstrating on the other. The strong cavalry of the rearguard ought to be able to inform the commander in time and in a precise manner which way the enemy is coming in actual strength. We may assume from the wording of the question that the enemy is chiefly on the right bank; if he attacks in force on the left bank, he will need time to transfer his troops, which we thus gain. Encountering Pewsey Wood, he must proceed cautiously, which would also give us time to make ample preparations for receiving and deceiving him there, for the ground "G F" is quite open and overlooked from Newtown. He will probably not operate in equal force on both banks, as that would be a clumsy proceeding on his part, which we cannot assume, as he has defeated us already, and is therefore in all likelihood as good a tactician as we are, if not better. The commander of the rearguard himself, if he were the enemy, would surely keep his forces concentrated on the

right bank, unless far superior in numbers, as to which the problem reveals nothing, attack there, try to rush Newtown, get command of the bridges 6 and 7, and operate then as he chooses on one or the other bank, where he could reach the main body by the shortest route.

This gives the clue to how the commander of the rearguard will have to dispose his troops to meet his adversary successfully.

Newtown is a strong tactical pivot, as the village of Bazeilles, of which Newtown is a representative, proved, and may cause the enemy considerable delay in, or much preparation for, carrying it; the high ground in rear affords admirable positions to the artillery for effective fire, even far beyond Newtown and upon the ground on the left bank as far as "F." The artillery can remain there even after Newtown is in the hands of the enemy, and can then easily withdraw under cover to the Longside road, where it finds another excellent position. The cavalry finds ample cover in the folds of the ground, and favourable ground for guarding the flanks, for driving away the enemy's reconnoitring parties there, and for unexpectedly charging the enemy if he ventures upon a too hot pursuit after gaining Newtown, or when attacking it. The numbers of the infantry at Newtown may easily be exaggerated by the enemy; the bridges, 6, 7, and 5, allow a rapid concentration on the left bank in case

the enemy should after all venture to attack there. Pewsey Wood and the undulating ground easily hide all the weakness of troops possibly sent to there, and Parton forms a rallying point for concentrating again on either bank, in order to defend Shaw Wood or Shape Copse with Morton.

The commander being now clear as to how the enemy may operate, how he could meet the enemy's likely operations, and what facilities the ground offers him for these operations, determines upon the following:—

To order the outposts to delay the enemy as much as possible; to hold Newtown firmly for at least an hour and a half; to send cavalry and perhaps a small infantry force across bridge 6, ready to occupy the south-western part of Pewsey Wood; to hold the high ground north of Newtown with artillery; and to keep the remainder concentrated under cover of, and behind, Newtown, with the object of meeting the enemy on whichever side of the river he is advancing in force.

As this is what the commander determines, it remains for him now to let his troops know how he wishes this determination to be carried out; in other words, he must embody his determination, i.e. his tactics, in the orders which he issues to the troops. The question of the examiner—

"State how you would proceed ..." is thereby answered.

I must now refer the student to the first volume of these "Studies," where the necessary hints for framing orders are given.

He must further remember that the "Infantry Drill," section 151, 6., prescribes that—

"The manner of occupying a rearguard position differs from that of occupying a position meant to be resolutely defended. The object of a rearguard is to compel the enemy to deploy a considerable portion of his force before venturing to attack, and then to move off before the attack is pressed home. It can therefore place the greater part of its force in the fighting line from the outset, retaining a proportionately small part in reserve."

As regards the occupation of any defensive position, we read in section 128, 2. (a), of the same book—

"The extent of the position should be suitable to the strength and composition of the defending force. As a rough estimate, it may be assumed that a fairly strong position, partly entrenched, would require, including all arms and troops in reserve, about five men per pace.

"In the event of it being necessary to occupy a position too extended for the numbers available to defend it, it will usually be preferable to occupy the front thinly, keeping a strong reserve to reinforce at any threatened point, rather than to distribute the force generally throughout the front."

At this stage the commander will review in his

mind the forces he has available, in order roughly to determine the front he can fight on, and say to himself—

```
4 Battalions ... = 4 × 800 = 3200 men.

2 Regiments of cavalry = 2 × 400 = 800 ,,

2 Batteries of artillery = 2 × 150 = 300 ,,

Total ... 4300 ...
```

If five men are to defend a pace, then 4300 men defend  $4300 \div 5 = 860$  paces, say, roughly, half a mile at least, as we are a rearguard, and have, moreover, an hour and a half's time for entrenchments.

We are justified in extending to more than half a mile, because in section 127, 3., of the "Infantry Drill," we read—

"If a brigade be ordered to assault and carry a particular point in the enemy's position, its frontage should not exceed about a third of a mile, and may be required to be less. . . .

"Where the attack is not to be pushed home, a brigade will occupy a frontage of about half a mile..."

If, therefore, in the attack, when merely demonstrating, a brigade can fight on a frontage of half a mile, we can extend to more in the defence, where we have entrenched ourselves to some degree, and where we are only demonstrating as a rearguard.

The student having accompanied the writer thus far, should now, as requested in the previous little volume, at this stage of the solution of the problem, stop reading further and write out his answer independently, as he thinks it should be given, in accordance with the preceding or his own reflections, and then compare his answer with that given by the writer in the next part.

# II. The Orders. (Answer.)

The following answer to the problem is suggested, and the candidate should hand in to the examiner what is printed in italics. Repetition in print is unavoidable, as all the foregoing is only a *mental* operation which the candidate has to perform before he can set to work *writing* out his answer.

On receipt of the orders—which are supposed to have arrived on a September morning, after a night's rest—"to delay the enemy's advance sufficiently to gain time for the passage of the Forest of Arden by the main body," under the conditions "that the enemy is three miles to the south of Newtown at the moment the order is received," and "that the roads through Ashley and Challow are guarded by other detachments" of our force, the commander of the rear-guard would "proceed" immediately to

#### ORDER THE ALARM TO BE SOUNDED,

and while the troops are getting ready, despatch the following written order to the senior quarter-master:—

" To Senior Q.M.

"Black Eagle Hotel, Newtown, "7th September, 1893, 6 a.m.

"Collect all regimental transports at northern exit of Newtown. When assembled, move to Morton along road this side of river, following main body at a distance of one mile, leaving two carts and two mules per battalion, parking at northern exit of Newtown, and remainder of the ammunition carts likewise at the cross-roads west of Parton. You will send a copy of this order to the other quarter-masters. Escort will follow.

"X. Major-General.

"Handed written to:
"Dismounted Orderly."

He will next summon the commander of his outposts, who is supposed to be the commander of the 1st battalion.

Half of 1st Battalion.
4. 3. 2. 1. Comp.

Half of 1st Squadron 1st Cav. Rgt.

2. 1. Troop.

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The supposed strength of the outposts being as per margin, and the river being assumed as continuing its southern course, their disposition is presumably as follows:—

1st troop one mile south of Newtown on road "G," with

vedettes about half-mile in advance, guarding right bank;

2nd troop on road "F," abreast of 1st troop, with similar vedettes, guarding left bank;

No. 1 company, as support, at a point half-mile west of "G" and half-mile south of Newtown;

No. 2 company on road "G," half-mile south of Newtown;

No. 3 and 4 companies as reserve, in an alarmhouse at southern exit of Newtown.

One section of No. 4 battalion is supposed to have been sent for the night to bridges 6 and 7 as a support for the 2nd troop. This battalion is also supposed to have furnished the necessary village guards, and the 1st squadron of 1st cavalry regiment to have furnished from its 3rd troop two orderlies to each of the supports, the reserve, and the section at bridges 6 and 7.

Meanwhile the commander of the rearguard will have given to the senior medical officer, who is probably quartered in the same hotel, the following order:—

" To Senior M.O.

"(Same place.)
"7th September, 1893, 6.2 a.m.

"An action is imminent. Select a building at Newtown as hospital for the severely wounded, who cannot be removed without danger to themselves, and whom we must leave in the hands of the enemy when evacuating Newtown. Keep bearer company and field hospital parking at the northern exit of Newtown. Orders will reach you when to move to Parton.

"X. Major-General.

<sup>&</sup>quot; Sent in writing by:

<sup>&</sup>quot;Infantry Orderly."

On the arrival of the commander of the outposts the general will give him the following order:—

" To O.C. Outposts.

"(Same place.)
"7th September, 1893, 6.8 a.m.

"The enemy is three miles to the south of Newtown. Strength not given by head-quarters. The rearguard is to delay the enemy sufficiently to gain time for the passage of the Forest of Arden by the main body. The roads through Ashley and Challow are guarded by detachments of the main body; strength not known. We shall have to delay the enemy at Newtown for one and a half hours at least. Therefore:

"The outposts will obstruct his advance as much as possible, and quite in particular, find out on which bank he is advancing in force, reporting immediately. In any case, the outposts of the right bank will retire to the west of Newtown, rallying at the north-western exit, but holding their ground firmly against demonstrations, and only falling back slowly when the enemy presses in force. Your battalion will under all circumstances obstinately defend Newtown, and for that purpose your 2nd half-battalion will put in a state of defence the western, the southern, and south-eastern edge of that village. The two machine-guns of the brigade are placed at your disposal, and find a position at the south-eastern salient to sweep the left bank. and stopping anything steaming up the river. outposts of the left bank will continue to observe, and, if forced to retire, will do so towards the south-western corner of Pewsey Wood. Establish and uphold communication with the detachments on your right and left, reporting to me their strength and exact positions.

"Ammunition and field hospital for slightly wounded at northern exit of Newtown, whereto also you will send the light-duty men to form an escort. Severely wounded will be attended at Newtown.

"X. Major-General.

The commander of the rearguard having thus provided for the immediate measures to be adopted, will now, while his troops are assembling, himself get ready, and, while doing so, disclose his views to his staff officer, who was probably all the time present and attending to minor measures. He will gradually make up his mind how he will "proceed" further, whereby that staff officer becomes acquainted with the orders which the commander will issue to the rearguard. He will then send the staff officer to reconnoitre the ground north of Newtown and on the left bank, telling him to return within half an hour, and then himself go to the alarm-post, whither he will summon, or where he will find all commanding officers, and where he will issue the following, after having read out to them by an adjutant the orders given to the commander of the outposts:-

<sup>&</sup>quot; Verbal: to O.C. Outposts.

<sup>&</sup>quot; Taken down in writing:

<sup>&</sup>quot;by Adjutant."

#### REARGUARD ORDER.

"Newtown,
"7th September, 1893, 6.15 a.m.

- "1. In pursuance of the outpost orders just read, the artillery will at once move to the spur 600 to 800 yards west of the letter "T" in the word "FLEET," and prepare there some cover, opening fire on whatever of the enemy becomes visible, keeping an eye also on the left bank.
- "2. The 2nd and 3rd battalions will move to the cross-roads immediately north of Newtown and await there further orders, standing with piled arms under cover of Newtown.
- "The 4th battalion will draw in the section stationed at bridge 7 and march at once to the high ground close to where the batteries will take post, throwing up shelter trenches to the left and right of the batteries, then piling arms there and awaiting further orders. It will also send two companies to Parton to prepare that village somewhat for defence.
- "3. The 1st cavalry regiment will move to the right of the batteries, halting under cover in the valley there, reconnoitring, with whole squadrons even, warding off any of the enemy's reconnoitring parties, and watching any favourable opportunity for charging the enemy's advanced troops. Connection with the detachments to the right is to be constantly maintained.
  - "The 2nd regiment will move to the westernmost

salient of Pewsey Wood and act in the same spirit as the 1st regiment, but is in addition to defend Pewsey Wood provisionally by dismounting against any enemy who may be demonstrating on the left bank. The outpost cavalry of the left bank will in that case act under orders of the 2nd cavalry regiment.

- "4. By these measures I intend—
- "To hold the enemy in check, at any rate, at Newtown for at least one and a half hours;
- "To be ready to reinforce the battalion there when needed; or
- "To move with the remainder of the infantry across the river should the enemy advance in force on the left bank, and merely demonstrate on the right bank;
- "To be able to occupy the high ground where the artillery is stationed, when Newtown becomes untenable and when the enemy attacks in force only on the right bank;
- "To keep the artillery from the outset in a position where it can remain to the very last, whatever eventuality may arise;
- "To demonstrate as much as possible with our strong cavalry by dismounted action, in order to deceive the enemy about our actual strength and extent of position.
- "5. The light-duty men of the infantry, artillery, and cavalry are to be collected at the northern exit of Newtown, and to be marched under the command of a subaltern, to be furnished by the 4th battalion,

to Marton, to follow up the transport and act as an escort for it.

"6. I shall go to the outposts, but reports will find me till 7 a.m. at the southern exit of Newtown; afterthat time, where the artillery is stationed.

"X. Major-General.

" Verbal: to the assembled

"Com. Officers.

"Taken down in writing:

"by Adjutant."

The commander of the rearguard will now go to examine the measures adopted by the outposts;

Inform the commander of the outposts of the rearguard order just issued verbally to the commanding officers;

Reconnoitre from a favourable spot the enemy's advance;

Then return to the high ground where the artillery is posted;

Despatch an officer to the main body in order to keep himself constantly informed on the progress of the main body, and who is to look out at the same time for suitable defensive positions;

Report to the main body by this officer the measures the rearguard has adopted; and

Await the enemy's attack to meet it from whatever direction it may be delivered.

This completes the answer. When I commenced

the solution of this problem I was wondering what result I should arrive at, and now that it is finished I am wondering whether the examiner expected such an answer. To my mind no answer radically different from this can be given, as it appears to me the least that one could say in order to show "how" the candidate would "proceed." Yet the examiner must have been satisfied with less than that, and have expected a different answer, for the one here given occupies seven pages of foolscap, and to write these, even from dictation, would almost amount to a physical impossibility in the time available. Where, then, is the candidate to get the time for thinking out and arranging his answer if he has only one hour altogether in which to solve this problem? If two and a half or three hours were allotted to this problem, each candidate could do himself full justice; should he be ignorant, he would, at all events, not know how to fill up his time, and would deliver a very poor reply, which must relieve the examiner very much indeed of anxiety as to marking justly. I should think that with only one such tactical problem a candidate's capacity could easily be marked by an examiner, and I often wonder how he can possibly do justice to the candidates under the present system. But an answer to that would require a special treatise.

# III. Explanations.

As far as the examiner is concerned the problem is solved with the preceding part, since he does not ask this time for "reasons;" but the student probably wishes to have some further explanations and reasons for several little points mentioned in that part, and not touched upon in the "considerations."

There is the succession in which the orders are issued; that will first strike the student. The examiner has asked: "state how you would proceed." The candidate will do well if he always ties the examiner down to his own words; the latter is thereby continually reminded of the question he has asked, and the former is not so liable to go astray and wander from the subject. If we have to state how the commander of the rearguard "proceeds," then the more realistically we can depict his proceedings the more correct will the answer turn out.

When a rearguard action is imminent, it will be the anxiety of the commander, more than in any other, to get his encumbrances rapidly and well out of the way, and to provide for the care of the wounded, in order to leave as few as possible in the hands of the enemy, before whom he must in any case retire after a certain time. The enemy should know as little as possible about our losses, and get as little chance as possible to gather information from prisoners.

His next care will be to provide the outposts with the necessary instructions, as upon them will fall in the first instance the duty of delaying the enemy until the preparations for defence by the rearguard are completed. As the commander of the outposts is assumed to be in the same village, he can be summoned to the presence of the commander of the rearguard and receive his instructions personally, and before those given later on to the other commanding officers, and this for two reasons: firstly, because the commander of the rearguard may not have quite made up his mind at that moment how he will act; and secondly, because that later order can still reach him in time for acting in concert.

The staff officer is sent off on his reconnoitring errand before the orders are issued to the assembled commanding officers, because he knows the intentions of his general from the conversation he had with him before leaving his quarters, and need no longer be present, but may better aid his general by making himself acquainted, during the short interval before the enemy's arrival, with the defensive capabilities of the ground on which his forces will have to operate.

These being the reasons why the orders were given in this succession, I now advise the student to turn back to the "answer," while following up the subjoined remarks.

The time and date when the order was assumed to be received are mentioned at once at the beginning of the answer without any explanations, because to give the latter would be indifferent, and because the examiner should at once see under what assumption the answer is given, as this shows him how we understood the situation from the wording of his question.

The order to the senior quarter-master is considered necessary, because all the vehicles should be under one command, for vehicles there will be, although the "Infantry Drill" says in section 151, 1., at the end: "It (the rearguard) should be lightly equipped and unaccompanied by baggage." That officer is ordered to keep this side of the river, because defiling over the bridges 6 and 7 might cause delay, and at Morton, where defiling must take place, a delay is not so serious, as it may be shortened by the vehicles fording the river on an emergency. Every vehicle which is not an ambulance, or carrying ammunition, is ordered to follow the main body at a distance of one mile, because they would come under the term "baggage," and should remain well away from the rearguard, not get into the way of the main body, and be able to turn at once into a side road, if the main body should unexpectedly halt and face the enemy.

The ammunition carts are disposed as stated in the order, because the "Infantry Drill" prescribes in section 132, 3., at the end, when marching, "as a rule, two small-arm ammunition carts and two mules will follow immediately behind each battalion, and the rest of the small-arm ammunition carts will follow the brigade." The reason for the position assigned to the two sections of the ammunition will be quite clear if the student will read section 132, 6., of the "Infantry Drill," which is too long to be quoted here. The quarter-master is requested to send a copy of his order to his colleagues, as that simplifies the task of the commander of the rearguard.

The strength of the outposts is assumed as a halfbattalion of infantry and a half-squadron, because as few men as possible should be employed for that duty, and because the whole rearguard, if cantoned in alarm-houses, is practically a reserve of outposts. The country seems open to the south, and two good roads lead towards the enemy, and, therefore, cavalry is employed even during night, because it can be pushed further forward and give more rapid information-galloping on the roads-than infantry could. And why should cavalry not always be employed on that duty in the foremost line, whenever possible, as it can and must be so when employed ahead of the army as a strategical advanced guard, with no infantry available to perform the outpost duty?

It was considered necessary to send a section of

infantry, independent of the outposts, to guard bridges 6 and 7, because the cavalry on the left bank will feel more secure, and a raiding party of the enemy sent during the night to destroy these bridges, in order to prevent the rearguard from rapidly crossing over to meet the enemy on the left bank, where he might intend to operate on the next morning, would find its plans frustrated. The 4th battalion is chosen to furnish this section and the village guard, because it is supposed to be acting the next day as the rearguard of the brigade, if retreat could be continued unmolested, as was probably assumed by the commander of the rearguard on the preceding evening. That battalion would have been the last to leave the village after the outposts had retired through it, if no action were imminent.

The orderlies are furnished from the other half of the 1st squadron and not from the outpost cavalry, as this would weaken those two troops too much.

The chief medical officer must know what action is intended, and the probable course events will take, so as to make his arrangements for the slightly and severely wounded, and also where to establish his ambulant hospitals. The hint is given that orders will reach him when he is to move to Parton, as the commander does not know whether the real action will not be fought on the left bank, in which case Parton must be considered as the only suitable point for collecting the severely wounded.

All the orders are supposed to be sent by dismounted orderlies, because the difference in time otherwise is but small and progress on foot in a village, with everybody hurrying to arms, is safer, and perhaps in the long run more rapid.

The order to the commander of the outposts is stated to be given at 6.8 a.m. because at 6 a.m. the order to "delay" the enemy is supposed to be received by the commander of the rearguard, and no more than eight minutes need elapse before the commander of the outposts can appear, as he is in the same village and perhaps within a quarter of a mile from head-quarters of the rearguard.

In the orders to the commander of the outposts these latter are ordered to retire to the west of Newtown, in order to clear and unmask the field of fire of the defenders of that village, and to rally at the north-western exit in order to form a fresh reserve to their own battalion, and to be stronger on that side, as it is unlikely that the enemy will press hard on the south-eastern side of the village on account of the river. Against demonstrations of the enemy the outposts are ordered to hold their ground firmly, firstly because there is no danger for them, and secondly they thereby oblige the enemy to keep away still further on the left bank if he should attack there, which causes, perhaps, all the delay we need, and relieves us from any other fighting on that day.

The 1st battalion is charged with the defence of Newtown, and therefore its second half is ordered to prepare that village for defence during the hour the other half is delaying the enemy, for those who defend a locality should also prepare it for defence.

One battalion is considered a sufficient garrison for the village, because its front to be defended is about 800 to 900 yards long, and one man per yard including inner reserves is considered sufficient as a minimum in ordinary circumstances, and is so certainly here, where we are only making demonstrations.

The machine-guns at the south-eastern corner of Newtown are well placed to make up any weakness in the defence of the left bank, if the enemy is merely demonstrating there, or to keep him at a respectful distance, if he attacks there in force, until we have made arrangements to meet him in sufficient strength. It may be argued that the machine-guns would for that purpose be better attached to the 2nd cavalry regiment and be placed to more advantage in Pewsey Wood. I quite agree, for also in my opinion the infantry magazine smallbore rifle is quite sufficient, and the machine-gun has no raison d'être with the infantry, but is au arm that is admirably suited to supply the want of defensive capability of cavalry in such actions as here described, and supplies in a compact and condensed form, whatever a mongrel and cumbersome force like mounted infantry can furnish and perform. However, I have assumed that the cavalry has two machine-guns as well, and by the cross-fire more effect is looked for than by concentrating all the machine-guns of the rearguard in Pewsey Wood; and, besides, it is against the rule to separate from the tactical units, without adequate reasons, anything assumed as necessary by organization. In the paragraphs 114, 3. and 117, 5. of the "Infantry Drill" will be found the necessary hints for the employment of machine-guns in the attack and defence generally.

It is particularly important for the commander of the rearguard to know the strength, composition, and position of the detachments guarding the Ashley and Challow roads, and therefore the commander of the outposts is specially enjoined to ascertain this and to uphold constant communications with those detachments, thus effectively securing the flanks and reporting any turning movements of the enemy, which, after all, are not dangerous as occupying too much time, of which we need only one to one and a half hours in order to get the main body away to a safe distance.

The reasons for everything given in the "Rearguard Order" are quite apparent and hardly need, for their tactical part, any explanations, as the 4th paragraph of it states all plainly enough. They are based chiefly on the numbers 12, 11, 9, 8, and 7 of

section 151 of the "Infantry Drill," on section 22, Part III. p. 292, and section 7 (2), Part VII. p. 477 of vol. ii. of the "Cavalry Drill," 1891. For convenience' sake, and knowing how seldom one is inclined to look for references, if the book is not just to hand, they are here repeated.

From the "Infantry Drill":-

"Too great a distance should not be allowed to intervene between the rearguard and the force it is covering. When a rearguard halts to fight, every moment separates it further from the main body; whereas with a pursuing force every moment brings its reinforcements closer."

"A rearguard should keep patrols as widely as possible to its flanks. Early information will thus be obtained of any attempt of the enemy to pass between the rearguard and the main body. But it is seldom advisable to detach parties of infantry and artillery to move at a distance on the flanks. If the enemy be in force, these parties could effect little. If he be not in force, his movements in that direction, once they are discovered, are of little importance. The rearguard should, as a rule, move concentrated, ready to fight with its full strength, but keeping scouting parties well out to its flanks and rear to obtain information.

"In withdrawing from a position a part only of the force usually moves at a time, the part that moves first occupying the next favourable ground in rear to cover the retreat of the remainder.

"A point of great importance to the commander of a rearguard is judging the proper time to retire. By retiring too soon he would be only partly carrying out the work required from the rearguard. By holding on too long he may endanger his retreat, and the rearguard may be driven back in disorder.

"Counter-attacks should seldom be resorted to unless for some urgent purpose. It cannot be hoped to inflict an appreciable defeat on the enemy, who is being constantly reinforced by troops in rear, and it is of more importance to save one's own men for the arduous duty assigned than to inflict a loss on the enemy that he can quickly make good."

From the "Cavalry Drill" (page 292):—

"1. The arming of cavalry with a carbine enables it to carry out its special duties independently of the other arms, and to attain the object in view under circumstances which preclude the possibility of a mounted combat; but cavalry has not the power, nor is it in accordance with the spirit of the arm, to attempt to carry on a long-continued fight with firearms. Dismounted action, therefore, is to be resorted to only when the mounted combat is unsuitable, or certain to yield inferior results; and when once resolved upon,

it must be prosecuted vigorously and with sufficient force.

- "2. The cases in which cavalry are most frequently employed dismounted are—
- "(a) To hold localities until the arrival of the infantry.
  - "(b) . . .
- "(c) To offer resistance, during a retreat, sufficient to compel the enemy to deploy, or at any rate to necessitate his making a reconnaissance; thus, in either case gaining time.
  - "(d) . . .
  - "(e) . . .
  - "(f) . . .

"In addition to these cases, dismounted fire-action may sometimes be employed with effect to create alarm or deceive the enemy as to the presence of infantry. . . ."

On page 477—

"The long range of field-guns, and the moral and material effect of their projectiles, must always maintain the value of horse artillery in covering the movements of cavalry. The fire of machineguns will, however, be an important factor in many operations, particularly in those where cavalry has hitherto relied on the effect of carbine fire, or has been obliged to look for support to the fire of infantry."

The commander of the rearguard could not

"proceed" any further or order anything beyond what has been stated, for all the rest depends on the enemy, and the student should carefully bear in mind this point, which is so important in framing orders. In his orders the commander has sufficiently indicated where he will eventually take up his second position after having been driven out of Newtown.

The escort for the transport is composed of the light-duty men of the rearguard, because the less we weaken the latter the stronger we are where most needed, and a man with a sore foot or other slight disorder may still help and be able to defend on an emergency some waggons, upon which he may find a seat in turn.

Nothing is said in the order about position of ambulance and transport, as that is gleaned from the orders to the outposts, which were read to the commanding officers.

The commander himself goes to where the artillery is stationed, because it is there that he gets the best view and has that arm, which is so paramount for the defence, under his immediate control; besides, from there he can easily direct all movements and readily move to any point.

He has not given any orders for destroying the bridges 6 and 7 or preparing them for demolition after Newtown shall have been abandoned, because no hint was thrown out in the question that such a step was to be considered; for the "Infantry Drill," section 151, 13., says—

"Clear instructions should be given to the commander of a rearguard as to the extent to which he is at liberty to break down bridges, burn villages, destroy property, etc., with a view to impeding the enemy's advance; for the retreat may be only of a temporary character, and it may be in contemplation soon to re-occupy the country passed through."

After issuing the "Rearguard Order," the commander is said to "proceed" to examine the measures adopted by the outposts, and to reconnoitre the ground there, because the enemy being still some way off, the commander most naturally will at such a critical moment convince himself, if possible, that everything is properly carried out according to his intentions, and judge himself of the defensive strength of the ground and the enemy's first approach.

He despatches an officer to the main body with the objects as stated, since he must gauge the time of his resistance according to the progress of the main body and because the "Infantry Drill" prescribes in the off-quoted section 151, 10., that—

"When retreating, it is always advisable to send beforehand a reliable officer to the rear to note favourable positions for defence on the line of retreat of the rearguard."

### PROBLEM 3.

(Vide Official Report, Promotion Examination, November, 1891.)

N.B.—It may be assumed that the Fleet River is impassable below Morton, except at the bridges.

"You are in command of three battalions of infantry, which have been pushed forward in carts to support a cavalry screen; the latter is now five miles beyond the eastern edge of the map, facing east. You are ordered to hold the line of the Fleet River in such a manner as to secure the passages, even should the cavalry screen be driven in.

"The enemy's cavalry screen consists of six regiments of cavalry and two horse artillery batteries, whereas yours is of only half that strength; he has in addition a battalion of mounted infantry.

"Show on the map how you would dispose your troops, and state what preparations you would make, assuming—

- "(a) That your main army proposes to cross the river on the following day, and to move on B, C, and D.
- "(b) That you are senior to the cavalry brigadier and take command of the whole force, when the screen is driven in.
- "(c) That three hours at least will be available for your preparations."

## SOLUTION.

## I. Considerations.

At first we are only in command of three battalions of infantry which have been pushed forward in carts. As the exact spot is not mentioned at which the battalions have arrived, we can assume that their commander makes his dispositions while still on the road, and that from the moment the troops have arrived at the places as ordered by the commander, there are still three hours at least available for any preparations which he considers necessary. We need not inquire whether he has adopted any special measures of security while his troops are being carted.

The commander is probably provided with a map of the country; he would scan that, consider the orders under which his force is required to act, and then direct his troops accordingly. If he has no map, he will most likely gallop forward to Garnant Down, accompanied by his adjutant, and when arriving there request the nearest squadron leader to send a group as orderlies. He would thus be able to despatch his orders to meet the infantry on the march, so as to avoid detours by them. It is therefore indifferent, as regards the disposition of the troops, whether the commander has a map or

not; no appreciable delay in the execution of the dispositions need occur in the latter case.

His orders are: "To hold the line of the Fleet River in such a manner as to secure the passages, even should the cavalry screen be driven in." No doubt can be in the mind of the commander that in this case he has to go with his force beyond the defiles; that is a tactical principle which admits of no qualification. It is only a question how far beyond the river he will have to go. The "main army proposes to cross the river on the following day, and to move on B, C, and D." The bridges, 4, 5, 6, and 7, must therefore be secured under all circumstances, and sufficient space in front of them must be guarded, so that no hostile artillery is able to bear on them, if possible, while the main body is crossing, and that sufficient elbow-room is ensured for the deployment of that body after crossing, should a deployment become necessary. It is not likely that the latter will be necessary, because our cavalry screen is "five miles beyond the eastern edge of the map, facing east." The expression "screen," here, is a little vague, as such a screen is several miles deep; if by that word "screen" the foremost scouts are meant, then the main bodies of our cavalry can be assumed at the eastern edge of the map. Allowing a mile between the two hostile screens, and the hostile one also to be five miles deep and at least a day's march in advance of its

army, the enemy's main force is 5 + 1 + 5 + (10)or 12) = 21 or 23 miles distant from the eastern edge of the map, and not likely to reach it during a forced night-march. The worst which can happen is that the enemy during night also pushes forward some infantry in carts to support his cavalry in seizing the bridges of the Fleet River. But this can only be a small force, and it is not so easily done with three battalions of 1000 or 800 men each as we were lucky enough to do; for carts are not so plentiful and not so readily collected, if at all available, in the more or less scattered villages. An omnibus in London, on first-rate, almost level roads, drawn by two strong horses, carries 26 unarmed passengers, but it is estimated that for 10 armed men at least one two-horse waggon is required, which means 80 to 100 waggons per battalion, or 240 to 300 for three battalions, requiring 480 to 600 horses, which is certainly a large order.

If our rearmost cavalry of the "screen" is five miles beyond the eastern edge of the map, then the conditions for us are a little more favourable. But the examiner meant probably the foremost scouts to be five miles beyond the eastern edge, and this shall be assumed here.

Before the commander can finally decide how far in advance of the river he will dispose his troops, he will have to consider two more points besides the security of the bridges and the room for deployment of the main body, namely—

- 1. The facility for defence of the ground in the immediate front of the river, and
  - 2. The strength of his force-
  - (a) In relation to the position he will select, and
  - (b) In comparison with the force of the enemy.

If he reconnoitres the ground, he finds about one mile in advance of the river an admirable position for a manœuvring bridge-head on the ridge extending from Shefford, Ratby Farm, Garnant Down, and Pewsey Wood, and the Black Brook as an obstacle for the additional security of the bridges 6 and 7 on his right flank. If that high ground, with its naturally strong tactical pivots of Shefford, with the Forest of Arden in rear to fall back upon, and that forest itself acting as a formidable barrier for any advancing cavalry, of Shape Copse, and of Pewsey Wood, remains in possession of our force, there will be no possibility of the enemy bearing with his artillery on the bridges, because they are entirely screened from view. The ground between Challow and Pewsey Wood is, besides, so steep that cavalry action there, at least mounted action, is practically impossible; any one advancing there on foot would be exposed, not only to the frontal fire from shelter trenches, but also from the northern edge of Pewsey Wood or Challow.

The question is now, Can he occupy such an ex-

tended position with the small infantry force available? He has three battalions, but of three regiments of cavalry and one battery horse artillery he will take command when the screen is driven in, and therefore has practically all that force available for the actual defence of the position selected.

The defence against a superior enemy would be difficult; but is the enemy really superior? The problem plainly states the force we are opposed to, and we need not consider anything else. We may say that one company of infantry can be matched against one regiment of cavalry, acting mounted or dismounted. It would be hopeless for a cavalry regiment to charge one company of infantry posted in a village or wood; therefore no danger arises from the enemy's cavalry by mounted action while our infantry is posted in the tactical pivots. If the regiment dismounts, then only half can do so, a quarter holding horses, another quarter acting as an escort; but a hundred well-armed and disciplined infantry men may certainly be considered equal, if not superior, to two hundred dismounted cavalry men. Therefore the enemy's superiority of three cavalry regiments may be considered as counterbalanced by three companies of our infantry. The remainder of that battalion (five companies) may be considered to make us equal to the enemy's mounted infantry battalion. The commander of our force will surely take care to strike terror into the led

horses of the mounted infantry, by singling out a dashing squadron leader, whose only duty would consist in nothing else but to get at the horses of these dismounted foot soldiers, disregarding everything else, cutting them down and dispersing or capturing them. The fighting spirit of these mounted infantry men may be considered to have sunk to half its usual level as soon as they leave their horses; for half the mind is in front, and the other half in rear with the horses, not during manœuvres. of course, but surely in actual warfare, if we understand human nature; therefore half an infantry battalion (or five companies as here assumed) we consider a match for that battalion of mounted infantry pitted against us in this instance. A balance of two battalions of infantry is therefore left in our favour against the enemy's one battery of horse artillery, by which he is superior. If we allow one battalion to weigh equally in the scale with one battery of horse or field artillery, we are not taking undue advantage over the enemy.

Theoretically we are therefore superior to the enemy, and it is not boasting if we also say practically.

It is thus clear that we can hold such an extended position, for we can be superior wherever the enemy attacks us, if we only dispose our troops in such a manner that the enemy is held in check for a short time at any point along the whole line, where he

might have concentrated the greater part of his forces until reinforcements can be brought up on our side.

Concluding these considerations, the commander determines the following:—

- 1. To leave detachments as special guards at bridges 4, 5, 6, and 7.
- 2. To hold the line Shefford, Garnant Down, Pewsey Wood, apportioning to the tactical pivots, small detachments which will be practically outposts.
- 3. To concentrate the remainder in a central position to sustain those small parties distributed in the tactical pivots, or to move in any direction where the enemy might attack in force.
- 4. To prepare entrenchments for the artillery to retire into, when the screen is driven in, to order the detachments to entrench themselves as much as possible, being aided therein by special working parties sent from the body kept concentrated, and to order similar parties to throw up shelter trenches or breastworks in suitable places on Garnant Down and the spurs running north and south from there.
- 5. To communicate with the commander of the cavalry at once, to acquaint him with the brigadier's dispositions, and in what direction he wishes the cavalry and artillery if possible to retire, when driven in.
- 6. To give a special instruction to the cavalry commander for singling out a squadron which has

only to concern itself with the horses of the mounted infantry.

It cannot be repeated often enough that, like a commander before he acts, so also a student or candidate in an examination before he gives his answer, which is his part of acting, must above all be clear as to what is wanted of him, and what he is accordingly expected to do. The commander by his orders, that is, the candidate by his answer, then shows how he does it. This is shown in—

# II. The Orders. (Answer.)

(The actual answer to be handed in at an examination is printed in italics.)

The examiner requires two distinct answers, viz.—

- 1. "Show on the map how you would dispose your troops," and
  - 2. "State what preparations you would make."

The actual showing on the map how the troops are disposed is a mere mechanical operation, which I shall not perform, as it unnecessarily adds to the expense of the book, and can be seen on any map accompanying military history. The student can readily put in the troops as he gathers their position from the following orders, and has then given the first answer. It is best if he shows, on the margin afterwards, an explanation thus—

#### Explanations:

I section of a company.

1 company.

1 battalion.

Or, if he is neat, he may write on the map alongside each body of troops, e.g.  $\frac{1}{2}$  I.,  $\frac{3}{8}$  II., noting on the margin—

#### Explanations:

- $\frac{1}{2}$  I. means one section 2nd company, 1st battalion, or
- $\frac{3}{8}$  II. means three sections 8th company, 2nd battalion.

In the orders which the commander actually issues it is difficult to separate the answers (1) and (2); however, I will omit to state anything in them about "preparations," which in war would really be mentioned, and reserve that for answer (2), so that the student may see the answer which it is proposed he should hand in without repeating here anything in print.

The commander will call to his side the three officers commanding the battalions, and give them verbally the following order:—

"We are to support the cavalry screen, which consists of three regiments and one battery horse artillery, and is with its foremost scouts five miles beyond the eastern edge of the map, and are ordered to hold the line of the Fleet River in such a manner as to secure the passages, even should the cavalry screen be driven in. Our main body proposes to

cross the river to-morrow, and to move on B, C, and D. I shall take command of the cavalry and artillery as well when they are driven in. We shall have three hours at least for preparing any defences.

"The enemy is reported to have six regiments of cavalry, two batteries of horse artillery, and one battalion of mounted infantry.

"To carry out our task I intend to hold the line Shefford, Ratby Farm, Garnant Down, and Pewsey Wood, and to guard the bridges 4, 5, 6, and 7 specially.

"For this purpose the first battalion will send one and a half companies to 'D,' a half-company to Challow, one company to Shefford, which will leave one section at Ratby Farm; the remaining company of the half-battalion will bivouac south of the unfenced road Parton—Challow, about two-thirds of a mile west of the latter place, to act as a support for the section Challow—Pewsey Wood, exclusive of that village.

"The third battalion will leave one company at the river, disposed as follows, as special guards for the bridges:—

1 section at bridge 4 (Morton).

1 " 5 (Parton).

½ company at bridges 6 and 7.

They are to bivouac on the left bank, close to the bridge.

"The rest of the force-

1st battalion (4 companies), 2nd ,, (8 companies), 3rd ,, (7 companies),

will bivouac west of Shape Copse on Garnant Down, between the letters 'N' in 'Garnant' and 'O' in 'Down.'

"The detachments in the first line will consider themselves as outposts, seeking and maintaining connections with their neighbouring parties, and resisting to the utmost any attack by the enemy, as only dismounted cavalry may chiefly be expected.

"Whenever retreat becomes absolutely necessary, it will be made by each body to the bridge in its immediate rear.

"I shall bivouac with the force at Garnant Down.
"X. Lieut,-General."

The student can now put in his troops, and give the marginal notes as explained, which will be his answer (1).

I propose, as answer (2), the following:-

Having disposed his troops as shown and explained on the map, the commander will best state the preparations he would make by giving the subjoined orders:—

- "To the Officer commanding at 'D.'
- "The men, being fresh, can feed after dark. Use one company to entangle the roads at 'D,' and, as far as means allow, the southern part of the eastern edge of Pewsey Wood. For entangling the northern part of that edge I will send you two companies of your battalion from Garnant Down, which will have to return as soon as darkness sets in."
  - "To the Officer commanding at Challow.
- "Barricade the entrance at 'C'; after that feed your men. For putting Challow in a state of defence till darkness sets in, I will send two companies of your battalion. Supervise their works, or agree on the plan with officer commanding working party, if senior to you."
  - " To the Officer at Ratby Farm.
- "Prepare your farm for defence, and then feed your men."
  - "To the Officer commanding at Shefford.
- "Use half a company to barricade the road to B,' and then let your men have their meal. Two companies 2nd battalion will be sent to put Shefford in a state of defence, who will have to return after sunset. If officer in command of working party is senior, concert with him."

"To Captain west of Challow on the Parton Road.

"Throw up a shelter trench at eastern edge of slope, using all available implements, beginning at southern end of contour 850, working northwards; one company of 2nd battalion will work in prolongation northwards. Feed your men after finishing trenches."

" To C.O. of 1st Battalion.

"Send two companies, both under a sabaltern, at once to 'D,' and two companies likewise to Challow, with all available entrenching tools, to prepare Pewsey Wood and Challow respectively for defence as directed by the officer commanding there if senior, or in concert with him if junior. These companies will start to return to bivouac at dusk."

" To C.O. of 2nd Battalion.

"Send two companies to Shefford for preparing that village for defence in concert with officer commanding there. The companies start to return from Shefford after dusk. Send another company, each man provided with the 'entrenching implement,' to spur south-west of Challow for throwing up a shelter trench in northern prolongation of that to be executed by the company there. To return as soon as finished. One company will at once construct gun epaulments at Garnant Down where I shall direct, and trenches to right and left as I shall indicate. Two companies will entangle, till dark, the eastern edge of Shape Copse as far as the footpath from Challow."

" To the Officers at bridges 4, 5, 6, and 7.

"Render approaches to both ends of bridges difficult, but in such a manner that the obstacle can quickly and easily be removed from the inside, as troops will pass to-morrow. Watch the river constantly down at 6 and 7 and up at Morton, particularly there, for floating bodies.

"X. Lieut.-General."

"No other preparations at Morton and Parton are considered necessary, as these can be undertaken the next morning by perhaps two companies from the 3rd battalion, if there should appear any need for it. Any stronger profiles required than those entrenchments mentioned can be executed the next morning at daybreak."

"To the Officer commanding the cavalry.

"I am ordered to hold the line of the Fleet River in such a manner as to secure the passages which the main army proposes to cross to-morrow, moving on B, C, and D. I have three battalions brought up in carts and disposed as in the accompanying sketch (vide Map, answer I.), from which you will see that I intend to hold the line 'Shefford—D.'

"For that purpose you will co-operate with me in such a manner that, if driven in, your main force will endeavour to retire, keeping to the southern edge of Pewsey Wood, the rest keeping north of Shefford. You will send then one regiment to Garnant Down

for my immediate disposal and the battery, in any case, by the straightest road to Garnant Down as soon as your force has to give way.

"I particularly enjoin on you, if you should not have done so already, to select one squadron, whose only duty shall be to get by every and any means at the led horses of the mounted infantry, or to charge it as soon as it is mounted.

"X. Lieut.-General."

## III. Explanations.

In addition to the explanations on the margin of the map in answer to the first part of the problem, the candidate may also show there, when answering the second part, the profiles he proposes to give to his entrenchments, or do so on his paper.

The commander calls the officers commanding the battalions to his side, as it is assumed he has a map, and makes his dispositions on the march.

The order that each body is to retire to the bridge in its immediate rear is given to indicate that the supreme and final effort must be made there, and to ensure that each bridge is properly defended.

All parties are ordered to return from work to their stations when darkness sets in, as it is assumed that the three hours available for preparations are ending at that moment. It is, anyhow, assumed that, exclusive of feeding, or resting, or moving about, three hours' actual work are available. The entrenchments can be of the ordinary type, up to the breastwork given in the "Text Book of Fortification."

Nine companies are kept, during these three hours, at Garnant Down, as we must have some force in readiness at any moment. They can give their tools and implements to the working parties, which will also make use of anything of that kind found in the villages and farms.

The directions for feeding are given, in order to show that it is assumed that we have arrived in the afternoon, and that men brought up in carts need not have rest immediately, as would be necessary after a day's march. These entrenchings, after a long march, are mostly theoretical, and even in this instance would hardly be carried out to the same extent, in practice, as we have put down on paper.

The numbers of the battalions are stated from which the various parties and detachments are drawn, in order to show the examiner how we endeavour to preserve the tactical units.

On Garnant Down, the artillery commands most of the ground, and it is directed to retire straight to that height, if the screen begins to give way, because we want to get, as soon as possible, its co-operation with the infantry.

One regiment is directed to be sent for immediate disposal of the commander at Garnant Down, as he wishes to have a force at hand which he can rapidly throw from one place to the other to act as the enemy's mounted infantry is supposed to do. The commander of the cavalry gets no other instructions, but those to co-operate with the remainder, as he is an experienced elderly gentleman to whom discretion ought to be left, after giving him the general directions which we have mentioned.

## CONCLUSION.

We are living in an age which, perhaps, is more than ever striving after the ideal by the most realistic means.

If the student, while attending to these solutions, has, as it is hoped, pictured to himself the measures actually carried out on the real ground, as above described, the writer's efforts to treat Tactics, from a realistic point of view, will not have been entirely unsuccessful.

